DOCUMENT RESUME

ED 069 164 FL 003 504

TITLE	An Evaluation of the St. John Valley Title VII Bilingual Program, 1970-1971.
INSTITUTION	Heuristics, Inc., Dedham, Mass.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C.
PUB DATE	Oct 71
NOTE	398p.; Proj-OE-7-436
EDRS PRICE	MF-$0.65 HC-$13.16
DESCRIPTORS	*Bilingual Education; Community Involvement; *Educational Objectives; English (Second Language); Evaluation Methods; French; *Grade 1; Instructional Materials; Kindergarten; Management; Parent Role; *Program Evaluation; Second Language Learning; Staff Improvement; Standardized Tests; Tables (Data)
IDENTIFIERS	St. John Title VII Bilingual Program

ABSTRACT

The St. John Valley Bilingual Program for 1970-71 was instituted to help overcome the educational problems of French-speaking children in schools where lessons are conducted in English. Basically the program conducts instruction in the student's first language with an increasing use of the second language. This report focuses on the assessment of each objective within each project component: instruction, staff development, community involvement, materials development, and program management. The first part of the report summarizes the status of accomplishment of the first-year program goals for each component. Part 2 discusses the evaluation of each specific program objective and its status at the end of the program. Part 2 also presents the results of additional data gathered on the particular project components and commendations and recommendations for each component. Details on evaluation procedures are included. (Author/VM)

ED 069164

Project No. OE-7-436

OE-BESE

Frenchville and St. Agatha
Madawaska
Van Buren

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

SCOPE OF INTEREST NOTICE

The ERIC Facility has assigned this document for processing to: RC

In our judgement, this document is also of interest to the clearinghouses noted to the right. Indexing should reflect their special points of view. FL

An Evaluation of the St. John Valley Title VII Bilingual Program 1970-1971

FL 003 504

HEURISTICS
INC.

ED 069164

RECEIVED
JUL 18 1972
NMSU
E.R.I.C.

EVALUATION OF THE ST. JOHN VALLEY
TITLE VII BILINGUAL PROGRAM
1970-1971

HEURISTICS, INC.
Dedham, Massachusetts
October, 1971

Project Number - OE 7-436

TABLE OF CONTENTS

Page

INTRODUCTION 1

DESCRIPTION OF THE PROGRAM 2

PARTICIPANTS 4

EVALUATION PROCEDURES 5

PART I: SUMMATIVE EVALUATION OF FIRST YEAR GOALS BY PROJECT COMPONENT 8

INSTRUCTIONAL COMPONENT 9

STAFF DEVELOPMENT COMPONENT 30

COMMUNITY COMPONENT 36

MATERIALS DEVELOPMENT COMPONENT 42

MANAGEMENT OBJECTIVES 48

PART II: EVALUATION OF SPECIFIC OBJECTIVES BY PROJECT COMPONENT 52

INSTRUCTIONAL COMPONENT 53

Introduction
Results of Standardized Tests
Kindergarten Objectives
Grade One Objectives
Commendations and Recommendations

STAFF DEVELOPMENT COMPONENT 270

Evaluation of Specific Objectives
Additional Data
Commendations and Recommendations

COMMUNITY COMPONENT 304

Evaluation of Specific Objectives
Sociological Data Questionnaire Responses
Commendations and Recommendations

TABLE OF CONTENTS (CONT.)

MATERIALS DEVELOPMENT COMPONENT 342

Evaluation of Specific Objectives
Additional Data
Evaluation of Materials and Equipment Usage in the Classroom
Commendations and Recommendations

OVERALL PROGRAM MANAGEMENT 366

Position Qualifications and Responsibilities
Planning Objectives
Program Organization
Reporting Objectives
Communication, Coordination, Dissemination Objectives
Budget and Administrative Services
Commendations and Recommendations

INTRODUCTION

This report presents the evaluation of the St. John Valley Title VII Bilingual Program for the 1970-71 program year. The program served three school districts: SAD #33 - St. Agatha and Frenchville, Madawaska, and SAD # 24 - Van Buren. The program operated in kindergarten and grade one only, serving 122 kindergarten students and 145 grade one students in the three districts.

The services of the evaluators, Mr. Gilman Hebert and Heuristics, Inc., were engaged before the start of classroom instruction; therefore, evaluation of the project was both formative and summative in nature. The evaluation focuses on the assessment of the particular objectives for the program components and on additional data gathered during the course of the program.

DESCRIPTION OF THE PROGRAM

The St. John Valley Bilingual Program for 1970-71 was the first year of operation of a Title VII bilingual grant in the St. John Valley. In the Valley where a large majority of students speak French as a first language and are, therefore, handicapped in school where lessons are conducted in English, the bilinqual program conducts instruction in the student's first language with an increasing introduction and use of the second language in instruction. The first year of the program emphasized the development of readiness skills for the kindergarten children and basic language art skills for all program participants in both their first and second languages. In addition, the program focused on staff development, acquisition and development of materials for use in all phases of instruction, such as ESL and FSL, and information dissemination and community involvement.

The program was held in six public schools in the three school districts, SAD #24, SAD #33, and Madawaska; each district had both kindergarten and first grade classes. The program was held during regular school hours, with the exception of in-service training for the professional staff. Program activities required a refocusing and reorganization of the traditional curriculum in order to focus on specific behavioral objectives for the students and to include French instruction for both English-dominant and French-dominant students.

Project personnel included a project director, curriculum coordinator, evaluator, eleven teachers, and eleven aides. Not all project personnel were paid with project funds. Many of the salaries were paid by the local educational agencies. All members of the project staff were bilingual, and the majority had experience in working in kindergarten and/or first grade classrooms. Each class had between 17 and 29 pupils. Additional documentation of program activities can be obtained from the project files and from information presented in this evaluation report.

PARTICIPANTS

Participants were students who attended school in one of the three program districts. Students did not individually volunteer for the program. Instead intact classes which had teachers who had volunteered for participation in the program or who were selected by their district administrators to participate in the program were placed in the program. Table 1 shows the number of participants in the program at each grade level by district.

TABLE 1

Enrollment

School District	Number of Participants Kindergarten	 Grade 1
Frenchville and St. Agatha (SAD #33)	40	51
Madawaska	47	55
Van Buren (SAD #24)	35	39
Entire Program	122	145

EVALUATION PROCEDURES

The evaluation of the St. John Valley Bilingual Program was conducted by Mr. Gilman Hebert and Heuristics, Inc. Mr. Hebert was responsible for on-site evaluation; this involved construction of instruments to measure the program objectives in cooperation with the project teachers, organization of test administration, distribution of evaluation materials to the teachers, organization of data into an appropriate form for analysis, and dissemination of information to project administrators and professional staff about the current status of the project and accomplishment of its objectives. Heuristics, Inc. was responsible for the refining of the evaluation design, training the local evaluator, providing technical assistance by reviewing locally-constructed instruments, analyzing all data, preparing the final report, and overseeing the operation of the entire evaluation.

The evaluation of this bilingual project focused on the assessment of each individual objective of the project in each project component. Additional data were gathered which could be used as baseline data for comparing future projects and project groups to current project groups. These additional data included standardized achievement scores, evaluation of workshops by their participants, and information from a sociological data questionnaire completed by parents of program participants.

The following activities were involved in the evaluation of the St. John Valley Bilingual Program for 1970-71.

1. Measurement of students' cognitive achievement with the following standardized tests: Metropolitan Readiness Test, Common Concepts Foreign Language Test - French version, Michigan Oral Language Productive Test, Meeting Street School Screening Test, and Metropolitan Achievement Test, 1970 edition.
2. Construction and administration of teacher-made tests to assess each product objective of the instructional component.
3. Monitoring of instructional process objectives by the teachers' completion of daily process checklists.
4. Daily verbal feedback by the on-site evaluator to the project director; written monthly feedback to the teachers about the status of instructional process objectives through tabulation and reporting of process checklist responses.
5. Written report of pre-test results for all instructional objectives and achievement tests.
6. Construction and administration of instruments to assess each objective in the non-instructional components.
7. Construction, administration, and analysis of questionnaires for each in-service workshop.
8. Preparation of an interim evaluation report for inclusion in the continuation proposal.
9. Formal and informal interviews with all staff members.
10. Observation of classes by the on-site evaluator.

The results of the evaluation are presented in two parts in this report. Part I summarizes for each component the status of the accomplishment of the first year program goals. Part II discusses the evaluation of each specific program objective and its status of accomplishment at the end of the program. Part II also presents the results of additional data gathered on the particular project components. It also includes commendations and recommendations for each project component.

PART I

SUMMATIVE EVALUATION OF FIRST YEAR GOALS BY PROJECT COMPONENT

INSTRUCTIONAL COMPONENT: SUMMARY

Standardized Testing Results

A series of standardized tests was administered to selected program participants. These tests included the Metropolitan Readiness Test to measure readiness skills for the kindergarten students, the Common Concepts Foreign Language Test - French Version to measure aural ability in French, the Michigan Oral Language Productive Test to assess fluency in English as a first language, the Meeting Street School Screening Test to measure ability in visual-perceptual-motor and language skills, and the Metropolitan Achievement Test, 1970 Edition, Primary Level to measure reading and mathematics achievement for the grade one students.

The results on each of these tests, for the most part, indicate a wide range of ability among the program participants. The scores suggest a population which is heterogeneous in ability in the various skills measured by these tests. A more specific reporting of the results of achievement tests is included in Part II of this report.

Kindergarten: First Year Goals

The following is a listing of the first year goals for the kindergarten students.

1. Kindergarten children will demonstrate competence in the skills of reading readiness.
2. Kindergarten children will demonstrate improvement in their psychomotor skill development.
3. Kindergarten children will understand basic number concepts.
4. Kindergarten children will use patois French as an acceptable language and begin to use standard French in formal speech.
5. English-speaking kindergarten children will demonstrate basic oral communication skills in French.

Tables 2 through 6 demonstrate the status of each objective which relates to the first year goals for kindergarten children. For those objectives which were measured during both the pre- and post-testing, Tables 2 through 6 indicate whether the criterion specified in the objective was met on the pre-test and/or on the post-test. In addition, a notation is made if a significant difference existed between the pre-test and post-test scores. For those objectives which were post-tested only, an indication if the criteria specified in the objective was met on the post-test is included in Tables 2 through 6.

Goal 1: Kindergarten Children Will Demonstrate Competence in the Skills of Reading Readiness.

Ten kindergarten objectives were directed toward the accomplishment of this first year goal. Nine of these ten objectives were accomplished by the program participants by the end of the kindergarten year. Table 2 indicates the specific status of each objective.

TABLE 2

Accomplishment Status of Kindergarten
Reading Readiness Objectives

Objective	Was Criterion Met? Pre	Was Criterion Met? Post	Significant Difference (NS-Not Significant) (* - Significant)
K-1.1[1]	No-Yes	Yes	NS - *
K-1.2[1]	No-Yes	Yes	NS - *
K-1.3[1]	No-Yes	Yes	NS - *
K-1.4	Yes	Yes	NS
K-1.5	Yes	Yes	NS
K-1.6	No	No	NS
K-1.7	Yes	Yes	*
K-1.8	Yes	Yes	NS
K-1.9	Yes	Yes	NS
K-1.10	Yes	Yes	NS

1 - More than one test administered to measure objective

Table 2 indicates that the kindergarten students had mastered the following reading readiness skills at the criterion specified in the appropriate objective: visual perception (K-1.1), auditory perception (K-1.2), word recognition (K-1.3), pronunciation of Dolch basic words (K-1.4), pronunciation of words in pre-primers (K-1.5), identification of main characters, main ideas, and conclusion in a story (K-1.7), sequencing of activities in a story (K-1.8), repetition of a five-word English sentence (K-1.9), and creation of endings for simple stories in English (K-1.10). Students did not satisfactorily accomplish the skill of associating nouns and verbs with their corresponding pictures (K-1.6); therefore, this objective of the program was not accomplished. It is important to note, however, as stated in Table 2, that many of these objectives were accomplished at the pre-testing.

This situation suggests that the objectives may be inappropriate for the students because they possessed skills specified in the objectives before entering kindergarten. Or the pre-testing in October and November occurred too late in the program after some of the skills had already been taught. A third possibility is that the criterion levels specified for a majority of the objectives were not appropriate. However, the fact that no significant difference exists between the test scores for the majority of these reading readiness objectives seems to eliminate this possibility. The evaluators recommend that a review of these possible explanations be made and appropriate changes implemented.

Goal 2: Kindergarten Children Will Demonstrate Improvement in their Psychomotor Skills Development.

Table 3 presents the status of those objectives in the bilinqual program which were directed toward the acquisition of psychomotor skills.

TABLE 3

Accomplishment Status of Kindergarten Psychomotor Skills Objectives

Objective	Was Criterion Met? Pre	Post	Significant Difference (NS-Not Significant) (* - Significant)
K-2.1	No	Yes	NS
K-2.2	No	No	NS
K-2.3	No	Yes	NS
K-2.4	No	No	*
K-2.5	No	No	NS
K-2.6	No	No	NS
K-2.7	Yes	Yes	NS

The results shown in Table 3 suggest the participation in the bilingual program had a limited impact on the kindergarten students acquisition of psychomotor skills. Only three of seven objectives related to this skill area were accomplished. In addition, the results of testing for only one objective showed a significant difference between the pre-test and post-test scores. Yet, unlike the reading readiness skills the majority of the psychomotor objectives were not accomplished at the time of the pre-testing. These results suggest that a restructuring of the psychomotor objectives might be appropriate. A review of their appropriateness for kindergarten children, of the frequency of the process used to accomplish them, and of the appropriateness of the criterion level should be made. Specific reference to Part II of this report will indicate the processes directed toward the accomplishment of each of these objectives.

During the course of the program the students seemed to sufficiently develop the following psychomotor skills to satisfy the corresponding performance objective: tactual perception (K-2.1), perceptual constancy skills (K-2.3), and fine motor coordination skills (K-2.7). In addition, participation in the program seems to have significantly effected growth in spatial relationship skills (K-2.4). In order to develop such skills as visual perception (K-2.2), sense of smell (K-2.5), and gross motor skills (K-2.6), more intense instruction must be focused on these particular psychomotor objectives.

Goal 3: Kindergarten Children Will Understand Basic Number Concepts

The results shown in Table 4 indicate that, with the exception of one objective directed toward this goal, the pre-test scores of the kindergarten participants on measures of number concepts were below the criterion levels specified in the number concepts objectives. Table 4 indicates that five of the objectives which focused on acquisition of number concepts, had been accomplished by the end of the program year. In order to accomplish the specific program objectives, the students mastered the following skills: orally assigning the name of a number to a visual representation of the number

TABLE 4

Accomplishment Status of Kindergarten Number Concepts Objectives

Objective	Was Criterion Met? Pre	Was Criterion Met? Post	Significant Difference (NS-Not Significant) (* - Significant)
K-3.1	No	No	*
K-3.2	Yes	Yes	*
K-3.3	No	Yes	NS
K-3.4	No	No	*
K-3.5	No	Yes	*
K-3.6	No	No	NS
K-3.7	No	Yes	*
K-3.8	No	No	*
K-3.9	No	Yes	*
K-3.10	No	No	*
K-3.11	No	No	*

(K-3.2), understanding the number concepts 0 through 10 (K-3.3), orally naming the number of objects in a combination of two sets (K-3.5), naming a particular shape and selecting identical shapes from a group (K-3.7), and differentiating the sizes, shapes, and weights of different objects (K-3.9). The remaining objectives were not accomplished; these involved the skills of placing identical members of a set in a one to one correspondence (K-3.1), drawing the next object in a series of numbers (K-3.4), removing a stated number of objects from a set and naming the remaining set (K-3.6), orally naming a particular geometric shape (K-3.8), orally stating the correct time to the hour (K-3.10), and orally identifying the name of several coins (K-3.11).

Table 4 states, however, that for nine of the eleven number concepts objectives a significant difference existed between the pre-test and post-test scores. These results suggest that participation in the bilingual program classes had a significant impact on the students' knowledge of particular number concepts. The data analyses further imply that the specific criterion levels for the individual objectives might not be appropriate for many of the objectives, e.g. K-3.1, 3.2, 3.4, 3.8, 3.10, and 3.11. The evaluators recommend that a review of these particular objectives be made before the next program year, and appropriate adjustments considered and implemented. In addition, reference to the process used to accomplish each of these objectives should be noted and its appropriateness determined.

Goal 4: Kindergarten Children Will Use Patois French as an Acceptable Language and Begin to Use Standard French in Formal Speech

Four particular program objectives were directed toward this first-year general program goal for kindergarten children. Table 5 summarizes the results of the performance of the students on these objectives.

Table 5 indicates that the program had limited success in accomplishing the objectives related to use of French as a first language in the classroom. Only one of four objec-

TABLE 5

Accomplishment Status of Kindergarten French as a First Language Objectives

Objective	Was Criterion Met? Pre	Was Criterion Met? Post	Significant Difference (NS-Not Significant) (* - Significant)
K-4.1	Yes	Yes	*
K-4.2	No	No	NS
K-4.3	No	No	*
K-4.4	No	No	*

tives was accomplished: that students would demonstrate a comfortableness with French in the classroom (K-4.1). The remaining objectives, which focused on demonstration of standard expression and pronunciation (K-4.2), French vocabulary recognition (K-4.3), and ability to read basic French words (K-4.4), were not accomplished as specified in the project plan. However, for two of these objectives, that a significant difference existed between the pre-test and post-test scores, suggests that perhaps the criterion level specified in the objectives was not appropriate, and that the program may have had some impact on the development of these skills. The program seemed to have limited impact on the ability of the students to demonstrate standard expression and pronunciation (K-4.2), because the objective was not accomplished nor did a significant difference exist between the pre-test and post-test scores. Discussion with program staff indicated their recognition of French instruction in the classroom as one weakness of the program; they also noted the need for additional French materials for use in French instruction.

Goal 5: English-Speaking Kindergarten Children Will Demonstrate Basic Oral Communication Skills in French

Introduction of French as a second language to the monolinqual English students emphasized their mastery of simple classroom commands and procedures presented in French (K-5.1), the ability to sing three French songs and play three French games (K-5.2), and the oral identification of French vocabulary words (K-5.3). The monolingual students were tested on these objectives only at the end of the program year, as shown in Table 6.

TABLE 6

Accomplishment Status of Kindergarten French as a Second Language Objectives

Objective	Was Criterion Met?		Significant Difference (NS-Not Significant) (* - Significant)
	Pre	Post	
K-5.1	-	No	Post only
K-5.2	-	Yes	Post only
K-5.3	-	No	Post only

The results shown in Table 6 indicate that the English students mastered only the French skills involved in singing songs and playing games. Since no pre-test measures of these objectives were administered, exact impact of the students' participation in the program on their ability to understand and perform French commands or to orally identify French vocabulary words cannot be determined. The results on the Common Concepts Foreign-Language Test-French Version, however, indicate that no significant difference existed between the pre-test and post-test scores for the monolinqual English kindergarten students in their ability to comprehend spoken French; this suggests the program had limited impact on the English participants' knowledge of French.

Goal 6: Kindergarten Children Will Have Knowledge of the Valley's Acadian Culture.

Table 7 summarizes the status of the three objectives directed toward an acquisition of knowledge about Acadian Culture.

TABLE 7

Accomplishment Status of Kindergarten Knowledge of Acadian Culture Objectives

Objective	Was Criterion Met? Pre	Post	Significant Difference (NS-Not Significant) (* - Significant)
K-6.1	-	Yes	Post only
K-6.2	-	Yes	Post only
K-6.3	No	No	NS

Table 7 summarizes the results of the testing of the Acadian Culture objectives. The students mastered the ability to sing French songs and play French games (K-6.1) and to orally tell a story about a historical event or personality related to the Valley's history from a series of pictures (K-6.2). The student did not master the ability to identify at least three landmarks of the Valley area (K-6.3), a skill on which participation in the program had limited effect because there was no significant difference between the pre-test and post-test scores. A review of the process directed toward acquisition of knowledge about Acadian Culture reveals that limited instruction was devoted to this area of the curriculum. More specific details about the frequency of process activities are available by referring to Part II of the evaluation report.

Grade One: First Year Goals

The following list describes the first year goals for the grade one students in the St. John Valley Bilinqual Project:

1. First grade students will exhibit growth in their mastery of language art skills.
2. First grade children will understand and apply basic mathematics skills.
3. First grade children will use patois French as an acceptable language and begin to use standard French in formal speech.
4. English-speaking first grade children will demonstrate basic oral communication skills in French.
5. First grade children will have knowledge and appreciation of the Valley's Acadian Culture.

Tables 8 through 12 summarize the accomplishment status of the specific objectives directed toward the first year goals for the grade one students.

Goal 1: First Grade Students Will Exhibit Growth In Their Mastery of Language Arts Skills

Table 8 describes the program's impact on the accomplishment of language arts objectives for the grade one student.

TABLE 8

Accomplishment Status of Grade One Language Arts Objectives

Objective	Was Criterion Met? Pre	Post	Significant Difference (NS-Not Significant) (* - Significant)
1-1.1	-	-	-
1-1.2	No	No	*
1-1.3	No	No	*
1-1.4	No	No	*
1-1.5	No	No	*
1-1.6	No	No	NS
1-1.7	No	Yes	NS
1-1.8	No	No	NS
1-1.9	No	No	NS
1-1.10	Yes	Yes	*
1-1.11	No	No	NS

Of the eleven objectives directed toward the acquisition of language art skills, only two objectives were accomplished by the program. The objectives focused on the ability of students to pronounce words involving ending sounds "ed," "ing," and "s" (1-1.7) and on their ability to perform a series of comprehension skills (1-1.10). This latter objective had been accomplished on the pre-test, as well as on the post-test, although a significant difference existed between the pre-test and post-test scores. For a second group of objectives the required criterion level was not met on the post-test, but a significant difference did exist between the pre-test and post-test scores. This pattern of results suggests that, although participation in the program had some impact on the acquisition of skills in this group of objectives, the criterion level specified in each particular objective may not have been appropriate. This group of objectives included those related to the acquisition of the following skills: ability to pronounce words common to pre-primers (1-1.2), to pronounce words with particular initial consonants (1-1.3), to correctly name words with particular final consonants (1-1.4), and to correctly name words with particular middle consonants (1-1.5). Participation in the program seems to have no impact on the students' ability to correctly pronounce words using particular initial consonant blends (1-1.6), to correctly pronounce a series of compound words given a visual stimulation (1-1.7), to pronounce a series of word families (1-1.8), and to demonstrate particular oral and silent reading skills (1-1.9).

It should be noted that, although some students could perform each of these language arts objectives, a sufficient number of students to satisfy the criterion specified in the particular objectives could not perform the skill. These results suggest that a review of the appropriateness of the criterion level established for each of the language arts objectives and of the processes used to accomplish these objectives should be made.

Goal 2: First Grade Children Will Understand and Apply Basic Mathematics Skills.

TABLE 9

Accomplishment Status of Grade One Mathematics Skills Objectives

Objective	Was Criterion Met? Pre	Was Criterion Met? Post	Significant Difference (NS-Not Significant) (* - Significant)
1-2.1	No	Yes	*
1-2.2	Yes	Yes	NS
1-2.3	No	No	*
1-2.4	Yes	Yes	*
1-2.5	No	Yes	*
1-2.6	Yes	Yes	*
1-2.7	No	Yes	*
1-2.8	Yes	Yes	*
1-2.9	No	No	*
1-2.10	No	Yes	*
1-2.11	No	No	*
1-2.12	No	No	NS
1-2.13	No	No	*
1-2.14	No	Yes	*
1-2.15	No	No	*
1-2.16	No	No	*
1-2.17	No	No	*
1-2.18	No	No	*
1-2.19	NO	No	*

Table 9 indicates that the first grade program had varied success in meeting the particular mathematics skills objectives specified in its curriculum. By the end of the program students had accomplished objectives related to the following mathematics skills: differentiation between equivalent and non-equivalent sets (1-2.1), association of number symbols with a set of objects (1-2.2), writing and recognizing of the numbers 0 to 100 (1-2.4), understanding of the concepts 1/2 and 1/4 (1-2.5), orally reading the ordinal numbers 1 to 20 (1-2.6), using a number line to show number sequence (1-2.7), combining sets of objects up to 12 (1-2.8), accurately adding columns with 3 addends yielding sums through 12 (1-2.10), and accurately subtracting zero from a number and a number from itself (1-2.14). It should be noted that reference to Table 9 indicates that the pre-test status of many of these objectives varied.

A significant difference existed between the pre-test and post-test scores for all but two objectives, suggesting that the program had some impact on the acquisition of the following skills: orally counting from 0 to 100 (1-2.3), adding two numbers in horizontal and vertical form (1-2.9), adding three two-digit addends with no remaining (1-2.11), using the number line for addition (1-2.13), subtracting two-digit numbers with no regrouping (1-2.15), measuring line fragments of foot, inch, and half-inch (1-2.16), distinguishing pints and quarts (1-2.17), recognizing the time concepts of day, week, month, and year (1-2.18), and using the time concept of hour and half-hour (1-2.19).

Participation in the project classes seemed to have no effect on the students' acquisition of the concept cited in objective 1-2.12, adding two two-digit addends with no remaining using expanding notation, and of that cited in objective 1-2.2, associating number symbol with the set of objects, although the criterion in this latter objective was reached.

The results of the assessment of objectives related to mathematics skills suggest that a review of the criterion levels specified in these objectives and of the processes used to accomplish many of the objectives should be made to make them most appropriate for the population. Because for some objectives the criterion was met on both the pre-test and post-test and for others which were not accomplished at either testing a significant difference existed between the pre-test and post-test scores, a strong possibility exists that the criterion levels specified in the objectives are inappropriate.

Goal 3: First Grade Children Will Use the Patois French as an Acceptable Language and Begin to Use Standard French in Formal Speech.

Table 10 displays the results of the objectives related to the learning of French as a first language.

TABLE 10

Accomplishment Status of Grade One
French as a First Language Objectives

Objective	Was Criterion Met? Pre	Post	Significant Difference (NS-Not Significant) (* - Significant)
1-3.1	No	No	NS
1-3.2	No	No	*
1-3.3	No	No	*
1-3.4	-	-	Not Measured

The results summarized in Table 10 indicate that none of the four French as a first language objectives were accomplished by the project classes. (Due to an evaluative oversight no measurement of objective 3.4 was made). The program did seem to have some impact, however, on the students' ability in two of these FSL skill areas, demonstration of standard expression and pronunciation (1-3.2) and French vocabulary recognition (1-3.3). In addition, as noted previously, a significant difference existed between the pre-test and post-test scores on the Common Concepts Foreign Language Test - French Version for the French-dominant students. Participation in the program had no measurable impact on their confortableness with French in the classroom (1-3.1). These results suggest that a review of the French as a first language objectives should be made. Confirmation of this recommendation was made in comments by teachers and other members of the project staff. These professionals especially noted the need for a French specialist to provide additional materials in French and direction in teaching French as both a first and a second language.

Goal 4: English-Speaking First Grade Children Will Demonstrate Basic Oral Communication Skills in French

The acquisition of French skills by the English monolingual student was measured only at the end of the program. Table 11 summarizes the results of this assessment.

Table 11 indicates that the objectives relating to comprehension of simple classroom commands and procedures (1-4.1) and to oral identification of French vocabulary words (1-4.3) were accomplished by the program's participants. The program at the first grade level did not accomplish the French as a second language objective relating to the students' ability to sing three French songs and play three French games (1-4.2). A precise determination of the exact impact of participation

TABLE 11

Accomplishment Status of Grade One
French as a Second Language Objectives

Objective	Was Criterion Met? Pre	Was Criterion Met? Post	Significant Difference (NS-Not Significant) (* - Significant)
1-4.1	-	Yes	Post only
1-4.2	-	No	Post only
1-4.3	-	Yes	Post only

in the program on these objectives cannot be made because the objectives were not pre-tested. Based on discussions with project staff it might be assumed that the students possessed no knowledge of French when they entered the classroom, and, thus, their performance on objectives 1-4.1 and 1-4.3 were the direct result of their participation in the program. In addition, the significant difference between pre-test and post-test scores of the monolinqual English students on the Common Concepts Foreign Language Test - French Version implies that these students gained some knowledge of French during the course of the year.

Goal 5: First Grade Children Will Have Knowledge and Appreciation of the Valley's Acadian Culture

Of the three first grade curriculum objectives which relate to acquisition of knowledge about Acadian Culture,

TABLE 12

Accomplishment Status of Grade One
Knowledge of Acadian Culture Objectives

Objective	Was Criterion Met?		Significant Difference (NS-Not Significant) (* - Significant)
	Pre	Post	
1-5.1	-	Yes	Post only
1-5.2	-	No	Post only
1-5.3	No	No	*

the program students accomplished that objective which required them to sing three French songs and play three French games (1-5.1). They did not accomplish the objectives which required them to tell a story about a historical event or person in the Valley's history from a series of pictures (1-5.2) and to identify at least three landmarks of the Valley area (1-5.3). A significant difference did exist, however, between their pre- and post-test scores on the identification of Valley landmarks. The program seems to have positively affected this skill, although not at the level specified in the objective. A review of the processes used to accomplish these objectives and a discussion with classroom teachers indicate that an insufficient amount of time was spent on teaching these skills; this most likely explains the failure of students to accomplish the majority of Acadian Culture objectives.

STAFF DEVELOPMENT COMPONENT: SUMMARY

The following is a list of the first year goals of the Staff Development Component of the St. John Valley Bilingual Project:

1. The project staff will display an openness and willingness to work with other staff members, community, consultants, and administration in producing educational change to a bilinqual program.
2. The project staff will be able to teach English as a second language.
3. The project staff will be able to teach French as a first language.
4. The project staff will be able to state performance objectives and have a favorable attitude toward them.
5. A cadre of aides will be developed who can assist the teachers in the classroom.

Table 13 summarizes the accomplishment status of both the product and process objectives of the staff development component.

Table 13

Accomplishment Status of Staff
Development Component Objectives

Goal	Objective	Was Product Criterion Met?				Was Process Criterion Met?			
		Yes	Partial	No	Cannot	Yes	Partial	No	Cannot
SD-1	SD-1.1	x				x			
SD-1	SD-1.2	x						x	
SD-1	SD-1.3	x				x			
SD-2	SD-2.1		x					x	
SD-3	SD-3.1	x					x		
SD-4	SD-4.1			x			x		
SD-5	SD-5.1	x				x			
SD-5	SD-5.2	x				x			

Goal 1: The Project Staff Will Display an Openness and Willingness to Work with Other Staff Members, Community, Consultants, and Administration in Producing Educational Change to a Bilinqual Program

Objectives SD-1.1, SD-1.2 and SD-1.3 were specified as a means to accomplish this first year goal. The status of these objectives summarized in Table 13 suggests that this first year goal was accomplished because each of the three product objectives directed toward it was accomplished. Their accomplishment means that the director displayed an openess and willingness to work with others in the project to produce educational change (SD-1.1), the Title VII project director, executive committee, Title III project director, and Title VII curriculum specialist demonstrated an ability to work together (SD-1.2), and the director and his staff demonstrated an ability to work together (SD-1.3).

Since the product objectives were accomplished, it is most likely that the processes used to accomplish them were appropriate. As expected, two of the process objectives related to this first year goal were accomplished: the project director will participate in a human relations laboratory (SD-1.1P), and the project staff will participate in the needs assessment laboratory (SD-1.3P). The process which specified that a fellow of NTL will conduct a sensitivity laboratory for the executive committee, the Title VII project director, the Title III project director, and the curriculum specialist was not performed. In spite of this, its corresponding product objective was met. The project director reported, however, that a need for this process activity still exists; he hopes to include it in the 1971-72 program.

Goal 2: The Project Staff Will be Able to Teach English as a Second Language

No progress was made toward this goal during the 1970-71 project year, as shown in the status of staff development objective 2.1 in Table 13. Because of the late start of the program, no pre-service or in-service courses were provided for teaching English as a second language. The project staff reported staff training in teaching English as a second language should receive a high priority for inclusion in the 1971-72 program.

Goal 3: The Project Staff Will be Able to Teach French as a First Language.

Table 13 indicates that product objective 3.1, "the teachers will demonstrate an increased skill in teaching French as a first language," was accomplished. The process used to accomplish this objective was quite similar to that stated in the original project plan. In-service courses in teaching French as a first language were provided, although no pre-service course was provided. Furthermore, the teachers maintained the 90% attendance specified in process objective SD-3.1P.

A review of the status of accomplishment of the instructional objectives related to teaching of French as a first language, however, suggests that more energy should be directed to this part of the program. Because the teachers did not complete this training in teaching French as a first language until the end of the 1970-71 program, it is quite possible that the impact of this training will not be felt until the 1971-72 program.

Goal 4: The Project Staff Will be Able to State Performance Objectives and Have a Favorable Attitude toward Them

This project goal was not accomplished during the 1970-71 program because, as shown in Table 13, SD-4.1 was not accomplished during the program year. The teachers did not achieve the criterion level established for the test at the end of Preparing Instructional Objectives by R.F. Mager. Some attempt was made to help the teachers accomplish this objective by providing them with Mager's text, although this process did not seem to be sufficient for the accomplishment of the objective. The project director reports that plans exist for using the

Vimcet Series on behavioral objectives as the process to attain this goal during the next program year.

Goal 5: A Cadre of Aides Will be Developed Who Can Assist the Teacher in the Classroom

Objectives 5.1 and 5.2 in Table 13 indicate that those objectives related to the participation and functioning of aides in the bilingual program were accomplished. Both product and process objectives were met. Therefore, the teacher aides contributed significantly to classroom operations (SD-5.1), and a majority of the aides participated in professional development courses (SD-5.2). In addition, pre-service courses were provided for the aides in the necessary clerical and managerial skills required by the job (SD-5.1P) and the program staff encouraged the aides to attend professional development courses (SD-5.2P), goal 5 of the Staff Development Component was accomplished.

COMMUNITY COMPONENT: SUMMARY

The Community Component of the St. John Valley Bilingual Program had a series of specific product and process objectives which focused on the following first year goals:

1. An Advisory Council will be formed which will assist the project in policy-formation and decision-making. The council will consist of businessmen, educators, parents, clergy, and students.
2. Valley residents will be informed of the Bilingual Program through the local media.
3. Parents will become actively involved in the project's operations.
4. Parents will support the Bilingual Program.
5. The project will establish a working relationship with Ft. Kent State College.

Table 14 summarizes the accomplishment status of the Community Component objectives.

Table 14

Accomplishment Status of Community Component Objectives

Goal	Objective	Was Product Criterion Met? Yes	Partial	No	Cannot	Was Process Criterion Met? Yes	Partial	No	Cannot
C-1	C-1.1	x				x			
C-1	C-1.2	x					x		
C-2	C-2.1		x			x			
C-2	C-2.2	x				x			
C-3	C-3.1			x		x			
C-3	C-3.2		x			x			
C-3	C-3.3	x				x			
C-4	C-4.1	x							
C-5	C-5.1	x				x			

Goal 1: An Advisory Council Will be Formed Which Will Assist the Project in Policy Formation and Decision-Making. The Council Will Consist of Businessmen, Educators, Parents, Clergy, and Students.

Reference to Table 14 indicates that objectives 1.1 and 1.2 were accomplished; therefore, an Advisory Council was formed which consisted of businessmen, educators, parents, clergy, and students (C-1.1), and which contributed to the program by making at least two suggestions that were accepted and incorporated into it (C-1.2). The first objective was accomplished by the originally anticipated process of informing the community of the opportunity to participate in the advisory group by letter and direct personal contact (C-1.1P). The second objective was accomplished by a partial performance of the anticipated process, that of holding Advisory Council meetings at least monthly during the year; some Advisory Council meetings were held although less frequently than once a month. The number of meetings which were held, however, seems to be satisfactory for the accomplishment of the corresponding product objective.

Goal 2: Valley Residents Will Be Informed of the Bilingual Program through the Local Media.

Information was disseminated to residents of the Valley through the local English-speaking newspapers and through a monthly bilingual bulletin which was published by the program in French and English. Information about project activities was also disseminated in the Valley through the participation of the Project Director and staff members in radio discussions and television programs. The goal that Valley residents would be informed about the project was accomplished.

Goal 3: Parents Will Become Actively Involved in the Projects' Operation.

Objectives 3.1, 3.2, and 3.3 included in Table 14 relate to parental involvement in the Bilingual Program. Although some parental involvement occurred, it could not occur to the degree anticipated at the beginning of the project year. No parent aide program was initiated (C-3.1) because of the late beginning of the Bilingual Program. Some parents visited the school at least twice a year, but not the 60% originally expected (C-3.2). The objective which stated that at least 50% of the parents would attend at least one meeting of the PTA group (C-3.3) was accomplished, although the process used to accomplish it was begun slightly later than anticipated. Although some degree of parental involvement in the program occurred, during 1970-71, an emphasis in increasing involvement should be part of future programs.

Goal 4: Parents Will Support the Bilingual Program.

In Table 14 the accomplishment of objective 4.1 indicates that the project had the support of the parents. An attitude questionnaire was used to measure the parents' enthusiasim for the program. The original evaluation plan required the parents to complete two questionnaires to demonstrate a significant improvement in their attitude toward the program. However, their highly positive response to the questionnaire administered in December prevented any improvement in their attitude from occurring. The goal of obtaining the parents' support for the bilingual program was accomplished.

Goal 5: The Project Will Establish a Working Relationship with Ft. Kent College.

One product and one process objective were directed toward the accomplishment of this goal; both were accomplished during the program year. The project director invited personnel from Ft. Kent State College to visit and participate in the program. The contact with Ft. Kent was initiated in the fall, 1970. Participation from Ft. Kent College occurred in the areas of in-service training and materials development. This fifth goal of the Community Component was accomplished during the first program year.

MATERIALS DEVELOPMENT COMPONENT: SUMMARY

The Materials Development Component involved ten specific product and process objectives which were directed toward the accomplishment of the first year goals for this component. Additional activities were performed that were not stated in these objectives, although the majority of the component activities focused on the particular product objectives. The first year goals for the Materials Development Component were

1. Project staff will investigate available bilingual French materials and cultural materials.
2. Project staff will investigate available ESL materials.
3. Project staff will select and begin to develop appropriate French, cultural and ESL materials suited to the project's objectives.

Table 15 summarizes the status of the product and process objectives of the Materials Development Component at the end of the 1970-71 project year.

Table 15

Accomplishment Status of Materials Development Component Objectives

Goal	Objective	Was Product Criterion Met? Yes	Partial	No	Cannot	Was Process Criterion Met? Yes	Partial	No	Cannot
MD-1	MD-1.1	x				x			
MD-1	MD-1.2				x	x			
MD-1	MD-1.3	x				x			
MD-1	MD-1.4			x			x		
MD-2	MD-2.1	x				x			
MD-3	MD-3.1		x			x			
MD-3	MD-3.2	x				x			
MD-3	MD-3.3	x				x			
MD-3	MD-3.5		x			x			
MD-3	MD-3.6		x			x			

Goal 1: Project Staff will Investigate Available Bilingual French Materials and Cultural Materials.

Four objectives were directed toward the accomplishment of this goal, which focused on the investigation of already existing materials which could be useful for the St. John Valley Bilingual Program. Reference to Table 15 indicates that two product objectives involving the investigation of already existing materials were accomplished. One objective was not accomplished; and one objective could not be accomplished. Establishment of a working relationahip between the project director, curriculum specialist, and the Title III project director, collecting of some Title III materials, and meeting with the Title III director occurred (MD-1.1). Also, written contacts were made with several bilingual projects in Canada, and personal contracts were made with the St. Lambert Project and some schools in Edmundston, New Brunswick, Canada (MD-1.2). The curriculum specialist did not collect any materials from the follow-through projects in Maine (MD-1.3) because no materials were available. In addition, a bilingual consortium for French materials was not established because additional funds required for it were not given to the St. John Valley Bilingual Project (MD-1.4). All process objective were accomplished as stated, with the exception of a failure to include a written report on the trip to Greenville in the project files. In general, however, the goal of investigating bilingual and French materials was accomplished during this first program year.

Goal 2: Project Staff Will Investigate Available ESL Materials.

Reference to objective 2.1 in Table 15 indicates that the goal of investigating ESL materials was accomplished. Both the product objective of contacting at least six other bilingual projects in their second year of operation and gathering ESL materials from them and the process activity of including a list of these projects in the file were accomplished.

Goal 3: Project Staff Will Select and Begin to Develop Appropriate French Cultural and ESL Materials Specific to the Project's Objectives.

Five specific program objectives were directed toward the selection and development of materials for the St. John Valley Bilingual Program. Two of these objectives were accomplished as stated in the original set of objectives; the project director and curriculum specialist reviewed project objectives with the staff to determine those which were attainable with available materials (MD-3.2), and a materials development team developed at least six tapes of stories in French and English for K-1 (MD-3.3). For one objective

(MD-3.1), different activities from those originally planned occurred. Instead of reviewing in writing materials collected in terms of program objectives, another procedure was implemented to review materials; the teachers used the materials in the classroom and then orally identified for the curriculums director the useful and appropriate materials. Two objectives were partially accomplished: the production of language master cards as needed for the performance objectives (MD-3.5) and the recording of twelve French songs and games for K-1 children (MD-3.6). Language master cards were developed by the individual teachers as required for classroom activities; the materials development team developed them only for Barbe and Dolch words. Objective MD-3.6 was only partially accomplished because fewer than twelve songs and games are recorded in the project files.

Process activities specified as a means of accomplishing the product objectives directed toward first year goal 3 were performed as stated. Materials development teams were organized to function in the areas of Acadian Culture, French song development, and development of language master cards. The teams did not operate, however, during the entire year. This lack of full-year operation may explain the partial accomplishment of some of the objectives directed towards this materials development goal. The project staff also noted the need for a French specialist who would direct the development of French materials. The staff felt that the present curriculum coordinator should focus on the development of ESL materials during the 1971-72 project year.

MANAGEMENT OBJECTIVES: SUMMARY

The management of the St. John Valley Bilingual Program was organized into several management areas: position qualifications and responsibilities, organization, planning, reporting, and communication-coordination-dissemination. A review of the overall management of the program reveals a highly efficient and effective administration of the program. For the most part, management objectives were accomplished on schedule.

Position Qualifications and Responsibilities

This aspect of management involved the selection of the project director, curriculum coordinator, and evaluator and the performance of duties by these three individuals. A review of the credentials of these three people indicated that they possessed the appropriate qualifications for their positions. They also performed all duties required of them.

Organization

The organization objectives focused on the delegation of the appropriate lines of authority to the Board of Directors, Advisory Council, SAD #33 Board of Directors, program teachers, and program aides. A review of the credentials of each of these groups indicated that all groups and individuals possessed the qualifications required for their positions. All individuals performed the duties required of them.

Planning

Table 16 indicates that, with the exception of five management planning objectives, this aspect of management was accomplished on schedule. Management objectives 2 and 3, scheduling parent meetings in the three districts and forming the Advisory Council were accomplished later than scheduled. The three management objective which were not accomplished, numbers 10, 14, and 26, involved scheduling meeting of local

Table 16

Accomplishment Status of
Management (Planning) Objectives

Accomplished On Time		Accomplished Late	Not Accomplished
1	16	2	10
4	17	3	14
5	18		26
6	19		
7	20		
8	21		
9	22		
11	23		
12	24		
13	25		
15	27		

advisory councils once a month, beginning an in-service training on teaching English as a second language, and conducting a second parent visit to school respecitively. For the most part, however, the planning objectives of the Project Management were accomplished on time. The project manager should be highly commended on this accomplishment.

Reporting

All but three reporting objectives were performed on schedule. Only the reports on the evaluation of the in-service program from October 6-12, the baseline data, and the evaluation of classroom activities and teachers aides were submitted late (at most one month later than scheduled).

Communication-Coordination-Dissemination

These objectives were also accomplished, for the most part, on schedule. Some objectives were not accomplished or were accomplished late. Publication of the monthly news letter was begun later than expected. A progress report to the Board of Directors and the Advisory Council was not made. A staff meeting on coordination of activities and on communication with parents was not held. A visit to Greenville was scheduled later than originally planned. Board of Director's report on communication was not made.

Budget and Administrative Considerations

The administrative staff of the St. John Valley Bilingual Program should be commended on the generally excellent management of the program, the appropriate use of funds, and on the accomplishment status of all program objectives.

PART II

EVALUATION OF SPECIFIC OBJECTIVES
BY PROJECT COMPONENT

INSTRUCTIONAL COMPONENT: INTRODUCTION

This section of the evaluation report first presents the results of the standardized tests administered to the program students. The results of the students' performance on the instructional product objectives, and a description of the extent to which the teachers performed the process objectives of this component are then reported. The evaluation of each product objective is presented and immediately followed by the assessment of the corresponding process objective. This allows the evaluator to directly relate any problems in the performance of the process to the accomplishment or non-accomplishment of the corresponding product objective.

The measurement of each product objective of the Instructional Component, was based on the administration of teacher-made objective tests, generally administered as pre-tests and post-tests. Because of the large number of program objectives to be measured, the evaluation design called for the administration of each test to one randomly-selected class at the appropriate grade level. In order to determine students' skill acquisition, the same class received both the pre-test and the post-test for a given objective. At the time of the pre-testing the teachers were not informed whether their class would get the same post-test; therefore, this theoretically prevented each teacher from emphasing only those objectives on which her class would be measured. Because the class to be tested on a particular objective was randomly selected, conclusions about the performance of all program classes on a particular objective could be based on the performance of the single class tested. Discussion of test results, therefore, refers only to the performance of the particular class tested, whereas comments about the accomplishment of the objective refer to its status for the entire program.

An assessment of the occurrence of the activities specified in the process objectives was begun in December and continued until May. Each teacher was provided with a process checklist on which she recorded on a daily basis those objectives she had taught. The evaluator collected the process checklist weekly; at the end of the month he tabulated the actual percentage of time spent on each objective as compared to the proposed frequency of the activity and reported this to the teachers. On-site observation by the project evaluator and discussions with classroom teachers confirmed the validity of the process checklist. Continuous feedback was provided to the teachers about the appropriateness of their classroom activities for accomplishing certain objectives by the curriculum coordinator, evaluator, and project director.

Reliability and Validity:

The available and relevant reliability and validity data for the standardized tests used in the evaluation of the St. John Valley Bilingual Project are included in the discussion of the test results. In addition, a determination of the reliability and validity of the teacher-evaluator constructed test was made.

Because of the large number of such tests, one for almost every instructional objective, the reliability for a random sample of 22% of the tests was determined. The Kuder-Richardson Formula 21 was used to determine the internal consistency and, therefore, the reliability of these measures. It should be noted that this reliability formula yields a consistently low estimate of reliability. The reliability for the majority of the tests was greater than .75.

The validity of these teacher-evaluator constructed tests was mainly content or face validity. Because all tests were constructed specifically to measure certain objectives, they possessed a high degree of content validity. A review of the particular tests to determine their congruence with the objective they constructed measured confirms the presence of high content validity in these tests. The determination of validity coefficients for each test is not within the realm of this study.

INSTRUCTIONAL COMPONENT:

RESULTS OF STANDARDIZED TESTS

The standardized testing program proposed in the original evaluation design has since been revised. These revisions were based on recommendations by various project staff members and other professionals who criticized the validity of translating some of the tests into a different language. The following discussion then, reports only the results of those tests administered as part of the revised evaluation design. Some tests were administered as both a pre-test in October-November, 1970 and as a post-test in May, 1971; others were administered only in May, 1971. All standardized test results form the baseline data for the project. The standardized test results are reported according to the specific skill area they measure.

Readiness Skills

The Metropolitan Readiness Test, Form A was administered to all kindergarten students in the project in May, 1971. Based on their performance on this test, a rating of their readiness for first grade work was obtained. Table 17 indicates the percentage of students in each district and in the entire program who received each of the five possible ratings on this test.

Table 17

Metropolitan Readiness Test --
Rating for Total Score

School District	N	% Rating				
		Superior	High Normal	Average	Low Normal	Low
Frenchville	37	5	38	40	14	0
Madawaska	47	60	24	17	0	0
Van Buren	32	16	32	25	28	0
Entire Program	116	29	32	27	12	0

According to the interpretative norms included in the manual for the Metropolitan Readiness Test, all students receiving a rating of Average, High Normal, or Superior are likely to succeed in first grade work, although they might experience varying degrees of success. The norms indicate that those students receiving a rating of Low Normal or Low are likely to have difficulty in first grade work. The results shown in Table 17 suggest that the large majority of students are likely to succeed in first grade work; only 12% of the students in the entire program received a score which signifies a likelihood of having difficulty in first grade work. No student received a rating of Low which would suggest that he required further readiness work. The high percentage of students who received Superior or High Normal scores is highly commendable; the program seems to be preparing these students quite well for first grade work.

Oral Ability in French

The ability of program students to understand spoken French was assessed by the Common Concepts Foreign Language Test - French Version. This 80-item test required the students to listen to a stimulus sentence read by the tester and then circle one of four pictures which the sentence represented. Kindergarten students completed one-half of the 80 items, for a total possible score of 40, and the grade one students completed the entire test for a possible score of 80. Both groups completed form 1 as a pre-test and form 2 as a post-test. Only a random sample of program students were tested; because students were randomly selected, however, the findings on this test can be generalized to a description of the skill acquisition of the entire program group. A t-test for correlated data was used to compare the pre-test and post-test scores for selected groups of children. Tables 18 - 20 summarize the results on this test for the kindergarten students.

Table 18

Common Concepts Foreign Language Test-French Version: Entire Kindergarten Group N, $\overline{X}$, SD, % at Criterion and t-ratio

N=44

	Pre	Post
$\overline{X}$	22.3181	22.3863
SD	6.1304	8.1832

Difference Between Means	0.0682
df	43
t	0.0662*

* Not Significant

Table 18 indicates that no significant difference existed between the pre-test scores and the post-test scores for the kindergarten students tested. Because this group included both French and English students, a determination of significant gain for either group was in order. Tables 19 and 20 summarize the t-test for correlated data for each of these two groups.

The results summarized in Tables 19 and 20 show that no significant difference existed between the pre-test and post-test scores for either English or French kindergarten students. Discussions with the classroom teachers about possible reasons for this seeming lack of impact of program participation on

Table 19

Common Concepts Foreign Language Test-French Version:_ French-Dominant Kindergarten Students
N, $\bar{X}$, SD, % at Criterion and t-ratio

N=29

	Pre	Post
$\bar{X}$	24.2413	24.7241
SD	5.6974	7.7009

Difference Between Means	0.4828
df	28
t	0.3371*

* Not Significant

Table 20

Common Concepts Foreign Language Test-French Version: English-Dominant Kindergarten Students
N, X, SD, % at Criterion and t-ratio

N=15

	Pre	Post
$\bar{X}$	19.2000	18.5333
SD	6.8137	8.3176

Difference Between Means	0.6667
df	14
t	0.5198*

* Not Significant

performance suggested the following explanations: the test was too difficult for the students; not enough French was introduced into the classroom; the two forms of the test were not comparable for these students. The evaluators recommend that the program staff investigate these issues and implement appropriate changes before 1971-72 program year.

The grade one students completed the entire test; a similar analysis was performed on their test results. Tables 21 - 23 display the results for this grade level.

Table 21

Common Concepts Foreign Language Test-French
Version: All Grade One Classes
N, $\overline{X}$, SD, % at Criterion and t-ratio

N=52		
	Pre	Post
$\overline{X}$	48.3846	55.3269
SD	13.0607	12.0012
Difference Between Means	6.9423	
df	51	
t	7.0832*	

* <.001

As shown in Table 21 a significant difference at the .001 level existed between the pre-test scores and the post-test scores for the grade one students in oral ability. These results suggest that the program had a significant impact on students' ability to understand and comprehend French. Since both English and French students were included in the testing population, an analysis of the scores for each of these groups separately seemed appropriate. These analyses are summarized in Table 22 and 23.

Table 22

Common Concepts Foreign Language Test-French Version: French-Dominant Grade One Students
N, $\overline{X}$, SD, % at Criterion and t-ratio

N=31	Pre	Post
$\overline{X}$	52.5161	60.1290
SD	8.4391	7.7325
Difference Between Means	7.6129	
df	30	
t	6.3866*	

* < .001

Table 23

Common Concepts Foreign Language Test-French
Version: English-Dominant Grade One Students
N, $\overline{X}$, SD, % at Criterion and t-ratio

N=21

	Pre	Post
$\overline{X}$	42.2857	48.7142
SD	15.9646	13.8295

Difference Between Means	6.4285
df	20
t	3.7000*

* < .01

A review of Tables 22 and 23 indicate that both the French-dominant students and the English-dominant students scored significantly differently on pre-test and post-test measure of their oral ability in French; the post-test mean score was higher than the pre-test mean score. Participation in the bilingual program seems to have had a positive effect on the grade one students' oral ability in French. The gains experienced by the grade one students as opposed to the lack of gains shown by the kindergarten pupils suggest that perhaps a greater maturity is required for demonstration of gains in oral French ability, or the addition of more French instruction into the curriculum in grade one is responsible for the significant difference between pre-test and post-test scores for that group.

Fluency In English

A random sample of English-dominant students completed the *Michigan Oral Language Productive Test* to measure their fluency in their native language. Originally an administration of a French translation of this test had been planned for the French-dominant students, but the problems of translation added too much invalidity to the measure. The *Michigan Oral Language Productive Test* involved the students' to a series of 43 items. In each question the tester presented the student with a verbal and pictorial stimulus; the student was required to complete the incomplete verbal stimulus sentence or sentences stated by the tester. The *Michigan Oral Language Productive Test* yields in addition to the total score, a series of subscale scores which describe the student's performance in particular grammatical and structural categories. The evaluator provided each teacher with a diagnosis of her students' weaknesses for the pre-test and the post-test; these reports are included in the project files. Tables 24 and 25 summarize the analysis of the results on the *Michigan Oral Language Productive Test* for the kindergarten and Grade one students; a t-test for correlated data was used to compare the pre-test and post-test scores.

Table 24

Michigan Oral Language Productive Test: Kindergarten Students

N, $\overline{X}$, SD, % at Criterion and t-ratio

N=11

	Pre	Post
$\overline{X}$	28.000	34.4545
SD	8.0226	4.8499

Difference Between Means	6.4545
df	10
t	4.5158*

* < .01

Table 25

Michigan Oral Language Productive Test: Grade One Students

N, $\overline{X}$, SD, % at Criterion and t-ratio

N=16

	Pre	Post
$\overline{X}$	32.6875	36.1875
SD	6.8439	7.1608

Difference Between Means	3.5000
df	15
t	3.3624*

* < .01

A reference to Tables 24 and 25 indicates that both the kindergarten and grade one English-dominant students scored significantly differently on the pre-test measure of their fluency in English. In both cases the post-test mean score was higher than the pre-test mean score. These results suggest that participation in the program probably had a significant influence on the students' fluency in English. A review of the diagnostic analyses reveals no uniform difficulties with particular structural patterns for all English-dominant students.

Perceptual-Motor-Language Skills

As a part of the regular testing program in the individual school districts of the program, all kindergarten and first grade students completed the *Meeting Street School Screening Test* in May, 1971. This test yields a total score and three subtest scores, Motor Patterning, Visual-Perceptual-Motor, and Language. The interpretative norms classify the subtest scores and the total score into three categories--Low, Average, or Above Average. Tables 26 and 27 display the percentage of students whose scores fall into each of these categories for the total score and three subtest scores. Because all students were tested with this measure the record of scores serves as baseline data on each student's perceptual, motor, and language skills.

Table 26

Meeting Street School Screening Test
All Kindergarten Students (N=111)

Subtest	% of Ratings		
	Above Average	Average	Low
Motor Patterning	31.5	61.3	7.2
Visual-Perceptual-Motor	36.0	63.1	0.9
Language	7.2	70.3	22.5
Total Score	23.4	66.7	9.9

Table 27

Meeting Street School Screening Test:
All Grade One Students (N=138)

Subtest	% of Rating		
	Above Average	Average	Low
Motor Patterning	21.7	72.5	5.8
Visual-Perceptual-Motor	8.7	73.9	17.4
Language	3.6	63.0	33.3
Total Score	4.3	84.8	10.9

The results shown in Tables 26 and 27 indicate that the majority of kindergarten and first grade students received a score of Average or Above Average on each of the three subtests and on the total score of the Meeting Street School Screening Test. However, both the kindergarten and grade one groups had a large percentage of students who received a score of Low on the Language subtest which includes such tasks as repeating words, repeating sentences, counting, telling a story, and language sequencing. The evaluators recommend that the project staff review the particular tasks involved in this subtest and consider integrating some of these activities into the kindergarten and first grade curriculum.

Reading in English

In order to measure the grade one program students' ability to read in English, the 1970 edition of the Metropolitan Achievement Tests - Primary I Level was administered to the students during May, 1971. The scores for each student describe in one way his ability to read in English. Because students were tested in May, 1971 a student who was performing at grade level would receive a grade equivalent score of 1.9. Table 28 summarized the student's performance on the reading subtests of the Metropolitan Achievement Test. It indicates the percentage of students who received a score above grade level, at grade level, and below grade level.

Table 28

Metropolitan Achievement Test - Primary I Level
Reading Scores - Grade One (N=139)

Subtest	% - Relation to Grade Level		
	Above	At	Below
Word Knowledge	32.4	11.5	56.11
Word Analyis	26.6	10,1	63.3
Reading	25.9	10.8	63.3
Total Reading	37.4	9.4	53.2

These results suggest that a larger percentage of students were below grade level in reading than above grade level or at grade level; the students seem to perform equally poorly on the on the three subtests. The evaluators recommend that a review of the content of these tests be made to determine if they are appropriate for the curriculum included in grade one in the St. John Valley. If the test is valid for the curriculum, a more intense focusing upon the concepts presented in the test should be made in the first grade instruction.

Mathematics Skills

The Metropolitan Achievement Test, 1970 edition, Primary I Level was administered to the grade one students to obtain a measure of their mathematics skills. One subtest assessed the students abilities to solve simple word problems and non-word, computation problems. A total mathematics score was obtained to describe their performance. Students who performed at grade level should have received a grade equivalent score of 1.9 because they were tested in May, 1971. Table 28A displays the percentage of students who scored above, at, and below grade level on this measure.

Table 28A

Metropolitan Achievement Test-Primary I Level-
Total Mathematics Score Grade One (N= 138)

% - Relation to Grade Level		
Above	At	Below
48.6	2.9	50.4

The results summarized in Table 28A indicate that the majority of students also scored below grade level on this measure of their mathematics skills. The evaluators recommend that a review of the content of the test be made by the program teachers. If it is valid for the first grade curriculum, appropriate changes in the grade one mathematics curriculum should be implemented to improve the students' performance on measures of mathematics skills.

INSTRUCTIONAL COMPONENT:

KINDERGARTEN OBJECTIVES

Objective K-1.1:

> At the conclusion of the year 90% of the children will provide correct verbal answers 80% of the time, when provided appropriate exercises for the following visual perception skills: Use of picture clues, recognition of basic shapes, descriminate likeness and differences in words and letters, demonstrate left-right arm movement. Their abilities will be measured by teacher ratings and observer checklists.

Evaluation:

Students were measured in each of the visual perception skill areas cited in objective K-1.1 as a pre-test and as a post-test. A t-test for correlated data was performed between the pre-test and post-test scores for each test. The analyses are summarized in Tables 29-33.

In order to measure their skill in the use of picture clues, the students were presented a large picture of a boy looking at an airplane and three small pictures of an airplane, a car, and a boat. The tester asked the child to identify which of the three small pictures the boy could see; this procedure was repeated for each of the three small pictures allowing a possible score of three correct. Table 29 shows that on the pre-test 84% of the students achieved the criterion level

Table 29

Instructional Objective K-1.1:
Use of Picture Clues
N, $\overline{X}$, SD, % at Criterion and t-ratio

N=23

	Pre	Post
$\overline{X}$	2.8000	3.0000
SD	0.6324	0.0000
% at Criterion	84	100

Difference Between Means	0.2000
df	22
t	0.3162*

* Not Significant

of three correct answers. On the post-test, however, 100% of the students achieved the criterion level of three correct answers; therefore this part of the objective was accomplished by the end of the program. Because of the high mean score on both the pre-test and the post-test Table 29 indicates that no significant difference existed between the two sets of scores. It should be noted that in order to obtain a significant difference it might be necessary to include more items on the test, or to include items which discriminate more successfully between various ability levels of students.

Table 30

Instructional Objective K-1.1:
Recognition of Basic Colors
N, $\overline{X}$, SD, % at Criterion and t-ratio

N=25

	Pre	Post
$\overline{X}$	7.2800	7.6800
SD	1.7554	1.2237
% at Criterion	84	92

Difference Between Means	0.4000
df	24
t	0.9701*

* Not Significant

The recognition of basic colors at the kindergarten level was measured by the teacher's presenting basic color cards to the child and requesting him to identify each color. Eight color cards were presented; therefore, the highest possible score for this measure was eight. Table 30 shows that on the pre-test 84% of the students received a score of 7 or better required by the criterion level stated in the objective. On the post-test, however, 92% of the students achieved the criterion level; therefore, the objective was satisfied on the post-test. Reference to Table 30 also indicates that because of the high mean pre-test and post-test scores, no significant difference exists between the two sets of scores.

Table 31

Instructional Objective K-1.1:
Recognition of Basic Shapes
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 24

	Pre	Post
$\overline{X}$	2.6666	33.9583
SD	1.2472	0.2000
% at Criterion	36	96

Difference Between Means	1.2917
df	23
t	5.2916*

* <.001

The teachers tested this section of the first kindergarten objective by presenting the child with a series of four basic shapes and asking the child to identify these shapes. The highest possible score in this test was four; the score required by the objective percentage of 80% correct was also four. The results in Table 31 indicate that on the pre-test only 46% of the students, far below the criterion level, could identify the four shapes correctly, while on the post-test 96%, or greater than the 90% required by the objective, could identify the shape correctly. As might be expected from these percentages, Table 31 also indicates that a significant difference in scores occurred between the pre-test and post-test results for the group tested. A difference so large could have occurred by chance less than one time in 1,000. In the area of recognition of basic shapes, then, the kindergarten students made significant gains during the program year.

Table 32

Instructional Objective K-1.1: Discrimination of Likenesses and Differences in Words and Letters
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 24

	Pre	Post
$\overline{X}$	2.4583	3.5416
SD	1.4994	0.8155
% at Criterion	40	95

Difference Between Means	1.0833
df	23
t	3.2907*

* <.01

The teacher-made tests constructed to measure the students' ability to discriminate likenessess and differences in words and letters involved the students' selecting from a group of letters or words on the right the match for the stimulus letter or word on the left. The highest possible score on this test was four; in order to satisfy the criterion of 80% correct, a score of four correct was required to accomplish the objective. Table 32 indicates that only 40% of the students could perform this task on the pre-test, and 95% of the students, more than required by the criterion specified in the objective, could perform this activity on the post-test. Similarly, reference to Table 32 indicates that a significant difference between the pre-test and post-test scores existed on this test. It seems possible to conclude, therefore, that participation in the bilingual program had a significant effect on the students' abilities to descriminate likenesses and differences in words and letters.

Table 33

Instructional Objective K-1.1:
Demonstrate Left - Right Eye Movement
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 24

	Pre	Post
$\overline{X}$	1.4583	2.0000
SD	0.8650	0.0000
% at Criterion	72	93

Difference Between Means	0.5417
df	23
t	0.6262*

* Not Significant

The ability to demonstrate left-right eye movement was shown by 72% of the students on the pre-test and 93% on the post-test, a percentage greater than the criterion percentage. The activity used to assess left - right eye movement involved the child's drawing lines from left to right on a sheet with two pictures on it, beginning at a place marked "X" on the sheet. Although no statistically significant difference between pre-test and post-test results existed, the criterion of the objective was satisfied on the post-test but not on the pre-test.

Objective K-1.1 seems to have been accomplished during the kindergarten year of the bilingual program. No part of the objective was accomplished by the required percentage on the pre-test; all five parts of this objective had been performed by the appropriate percentage of students on the post-test. These results suggest that participation in the program had a positive influence on the achievement of this objective.

Objective K-1.1P:

> The classroom teacher will evaluate each child individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

Interviews with teachers indicated that they evaluated each child individually on those skills cited in objective

K-1.1 at the beginning of the year, either formally with a structured classroom exercise or informally during instructional activities. Opportunities to perform exercises related to this objective were provided at least once a week by the following percentage of teachers:

December - 100%
January - 100%
February - 100%
March - 100%
April - 100%
May - 88%

These frequencies indicate that for five of the six months during which the process was recorded, K-1.1P occurred in all classrooms at the anticipated frequency, at least once a week. During the month of May it occurred 88% of the required time; this decrease in frequency was due to the use of many classroom hours for testing during May. Similarly, the appropriateness of the processes used to accomplish the product objective seems evident because the product objective was accomplished.

Objective K-1.2:

> At the end of the year, 50% of the children will respond correctly 50% fo the time to the following auditory perception skills: Can reproduce pronounced two or three syllable words; can hear differences in words; able to distinguish differences in the length of two pronounced words; able to hear sound at the beginning, end, and middle of words; able to verbally extract two rhyming words from a list of four words, two of which rhyme; knows number of sounds in spoken words. These will be measured by teacher ratings and observer checklist.

Evaluation:

Each of the four skills included in objective K-1.2 was measured by a separate objective test ("Knows number of sounds in spoken word" was deleted from the objective during the program). A t-test for correlated data was done on each of the four sets of scores. The results of these analyses are summarized in Tables 34-37.

Table 34

Instructional Objective K-1.2: Can Reproduce Pronounced Two or Three Syllable Words
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 21

	Pre	Post
$\overline{X}$	5.7619	5.7142
SD	0.4259	0.9333
% at Criterion	100	90

Difference Between Means	0.0477
df	20
t	0.2376*

* Not Significant

In order to measure the ability of students to reproduce pronounced two or three syllable words, each student was presented with one card with pictures of two syllable words on it, such as wagon, and a second card with pictures of three syllable words on it, such as bicycle. The teacher showed the student a picture, pronounced the word, and asked the child to repeat the word. The highest possible score on this test was six correct. The results in Table 34 state that 100% of the students achieved the criterion level on the pre-test, and 90% of the students achieved the criterion level on the post-test; both were sufficient to accomplish this objective. Because a satisfactory number of students could perform the task on the pre-test, it is possible that this part of the objective may not be appropriate for kindergarten students; the fact the no significant difference existed between the pre-test and post-test scores further suggests the lack of program impact on this skill.

In order to measure the students' ability to hear differences in words, the teacher talked informally with the child about a series of three picture pairs represented on cards; each pair represented two words which sounded different. The teacher attempted to have the child understand the difference in meaning between two stories because they represented two differently-pronounced words. The highest possible score was six correct; On both the pre- and post-test 100% of the students received at least the score of three required by the 50% correct criterion stated in the objective. Table 35 also indicates that no significant difference existed between the pre-test scores and post-test scores. This suggests that either the objective was

Table 35

Instructional Objective K-1.2: Can Hear Differences in Words
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 21		
	Pre	Post
$\overline{X}$	4.9523	6.0000
SD	0.7855	0.0000
% at Criterion	100	100

Difference Between Means	1.0477
df	20
t	0.2910*

* Not Significant

not appropriate for the kindergarten children or the processes used to accomplish it were inappropriate or too infrequent.

Table 36 shows the results of the measurement of this part of Objective K-1.2. Students were presented with a word card on which were printed three pairs of words. The teacher pronounced one pair of words and asked the pupil to identify the word which sounded longer. Similar procedure was followed for the other two pairs of words; the highest possible score in this activity was three. Students were required to answer two of the three items correctly to satisfy the criterion of responding accurately 50% of the time specified in the objective. Table 36

Table 36

Instructional Objective K-1.2:
Able to Distinguish Differences in
the Length of Two Pronounced Words
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 18

	Pre	Post
$\overline{X}$	2.0555	3.0000
SD	1.0787	0.0000
% at Criterion	76	100

Difference Between Means	0.9445
df	17
t	0.8755*

* Not Significant

indicates that 76% of the students received at least a score of two on the pre-test, and 100% of the students received an appropriate score on the post-test. On both pre- and post-test, therefore, the criterion percentage of 50% of the class responding correctly was obtained. No significant difference existed between the pre-test and post-test scores. Again, this suggests the possibility that the objective or its criterion level was inappropriate for these students because it had been achieved before they entered kindergarten.

The results in Table 37 indicate that a significant difference existed between the pre and post ability of students to

Table 37

Instructional Objective K-1.2: Able to Hear Sound at the Beginning, End, and Middle of Words
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 21

	Pre	Post
$\overline{X}$	1.7619	3.0000
SD	1.4769	1.3092
% at Criterion	29	52

Difference Between Means	1.2381
df	20
t	4.3641*

* <.001

hear sounds at the beginning, end, and middle of a word. On the pre-test 29% of the students accomplished the objective, and on the post-test 52% of the students, a larger percentage than required by the objective performed the required task satisfactorily. The ability to hear sounds in a word was tested by presenting the students with a group of objects; the teacher then named four objects and asked the student to name the two objects whose names sounded the same or rhymed. The highest possible score on this activity was eight correct. Table 37 indicates that the students' mean scores on the pre-test and on the post-test were quite low. Students showed significant gains on this skill during the program year; this objective seems to be an appropriate one for kindergarten children, and the criterion level of 50% established for accomplishment of this skill also seems to be a reasonable goal for which to strive.

Objective K-1.2 was accomplished; yet in only one of the four skill areas measured did the students demonstrate significant gains between the pre- and post-test. Also, in only one skill area the students were not at the criterion level specified in the objective on the pre-test. The evaluators recommend that a review of the appropriateness of this objective and especially of the criterion level specified in the objective be made.

Objective K-1.P

> The classroom teacher will evaluate each child individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

Each child was evaluated individually at the beginning of the year by his classroom teacher. Students were then grouped for instruction, and appropriate exercises were provide for practicing the skills specified in the objective. The frequency of these activities compared to the required frequency follows:

December - 83%
January - 93%
February - 100%
March - 90%
April - 100%
May - 81%

Generally, the teachers in the program were performing this process objective 80% as frequently as stated in the proposal. The actual process activities used seem somewhat appropriate for accomplishing objective K-1.2 because some gains in the percentage of students who could perform the objective occurred; the exact appropriateness of the process cannot be determined because of the high percentage of participants who had satisfied the objective on the pre-test.

Objective K-1.3:

> At the end of the year 50% of the children will respond correctly 50% of the time to the following word recognition exercises: recognizes his own name in print, knows names of letters, knows names of numbers 1 to 10, can match oral name of letter to written symbol, can match oral name of number to written symbol, can match capital and small letters.

Evaluation:

The analyses of scores obtained from the measurement of this objective are summarized in Tables 38-43; unless otherwise indicated, a t-test for correlated data was used to compare the pre-test and post-test scores for each test.

Table 38

Instructional Objective K-1.3:
Recognizes Own Name in Print
Summary of Sign Test for Correlated
Data and Percent at Criterion Level

Number with Pre and Post Scores	17
Number Showing Positive Change	3
Number Showing Negative Change	0
z	1.1547
p	not significant
% at Criterion-Pre	82
% at Criterion-Post	100

The ability of students to recognize their own name in print was tested by the teacher's presenting the student with five first names of students in the class and asking the student to select his own first name. The response of the child was scored as either "yes" or "no" he could or could not do the objective. Table 38 indicates that on the pre-test 82% of the students, a percentage greater than the 50% criterion level, could perform the task, and on the post-test 100% of the students could perform the task sufficiently. A sign test for correlated data, as summarized in Table 38, showed that no significant difference existed between the pre-test and post-test scores. The high percentage of students who could perform this task on the pre-test suggests that the appropriateness of

Table 39

Instructional Objective K-1.3:
Knows Names of Letters
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 17

	Pre	Post
$\overline{X}$	4.7058	13.4117
SD	6.2192	7.8819
% at Criterion	24	71

Difference Between Means	8.7059
df	16
t	5.5653*

* <.001

In order to measure the students' ability to know the names of letters, each child was asked to identify a series of consonant letters presented to him one at a time. The highest possible score on this test was 21. Table 39 indicates that on the pre-test 24% of the students could perform this task successfully, and on the post-test 71% of the students could accomplish this task successfully. A highly significant difference existed between the pre-test and post-test scores, a difference that could have occured by chance less than one time in 1,000. The students did not satisfy the criterion level specified in the objective on the pre-test, although on the post-test the 71% of students who could perform the objective was greater than the 50% required by the objective. Program participation seems to have had a positive impact on acquisition of this skill.

Table 40

Instructional Objective K-1.3:
Knows Names of numbers
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 17

	Pre	Post
$\overline{X}$	5.5882	8.5294
SD	3.6146	3.2560
% at Criterion	59	82

Difference Between Means	2.9412
df	16
t	3.1646*

* <.01

The naming of numbers from 1 to 10 was tested by presenting each child with a mixed series of numbers one at a time and asking the child to name the number presented. The highest possible score a child could receive was ten. Table 40 reports that 59% of the students received a score of five correct out of ten required by the objective on the pre-test, and on the post-test 82% of the students received an appropriate score. On both pre- and post-tests, then, the criterion level of 50%

of the class specified in the objective was accomplished. It is important to note, however, as shown in Table 40, that a significant difference at the .01 level existed between the pre-test scores and the post-test scores. This observation suggests that the criterion level specified in the objective was not appropriate for the students and should have been higher, since some growth in their ability to recognize the numbers 1 - 10 seems to have occurred, although no change was made in the accomplished status of the objective between the two testings.

Table 41

Instructional Objective K-1.3: Can Match Oral Name of Letter to Written Symbol N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 16

	Pre	Post
$\overline{X}$	2.6250	4.1250
SD	2.2878	2.3683
% at Criterion	35	76

Difference Between Means	1.5000
df	15
t	2.5354*

* <.05

The teacher measured the ability of the students to match the oral name of a letter to its written symbol by placing a card in front of the student with written letters on it and asking the student to point to the letter named by the teacher. The student was directed to locate six different letters yielding a possible score of six; 50% correct or a score of three was required to satisfy the objective. Table 41 says that 35% of the students satisfied the objective on the pre-test, and 76% of the students satisfied the objective on the post-test. In addition, a significant difference between the pre-test and post-test scores occurred. Because of the existence of a significant difference and because the objective was accomplished on the post-test but not on the pre-test, the appropriateness of this part of the objective as stated for the kindergarten children and the impact of the program participation on its accomplishment are evident.

The ability of the students to match the oral name of a number to its written symbol was tested by placing in front of each student a series of cards with written numbers on them and asking the student to locate the number specified by the teacher. Since the students were required to do this task for each number from 1 through 10 presented in mixed sequence, in order to satisfy the objective a student was required to answer five of the ten items correctly. Table 42 indicates that the criterion level of 50% of the class receiving a score of at least five was satisfied on the pre-test with 76% receiving such a score and

Table 42

Instructional Objective K-1.3: Can Match Oral Name of Number to Written Symbol N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 17

	Pre	Post
$\overline{X}$	6.4117	8.8822
SD	2.8297	2.7841
% at Criterion	76	88

Difference Between Means	2.4706
df	16
t	3.3814*

* $< .01$

on the post-test with 88% of the students receiving such a score. The results summarized in Table 42 also suggest that this criterion level might not be appropriate. Because a significant difference existed between the pre- and post-test scores it seems that the program affects acquisition of this skill, that they did gain a greater ability to match the oral name of a number to the written symbol during the program. It seems possible, then, that the criterion level of 50% is not sufficiently high because it had been reached on the pre-test.

The ability of students to match capital and small letters was measured by the student's pointing to a capital letter in

Table 43

Instructional Objective K-1.3: Can Match Capital and Small Letters N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 16

	Pre	Post
$\overline{X}$	6.1250	11.0625
SD	3.3888	4.8287
% at Criterion	35	76

Difference Between Means	4.9375
df	15
t	3.4661*

* <.01

the left column and then to the corresponding small letter in the right column. Since fifteen pairs of letters were presented, the highest possible score in this test was 15; a score of eight was required to accomplish the objective. Table 43 indicates that 35% of the students could do the task at the appropriate level on the pre-test, and 76% could perform the appropriate task on the post-test. The post-test scores satisfied the criterion stated in the objective, whereas the pre-test scores were too low to satisfy it. Similarly, a significant difference existed between the pre-test and post-test scores, a difference which could have occurred by chance less than one time in 100.

This aspect of objective K-1.3 seems to be an appropriate goal for the students in the kindergarten classes.

One-half of the tasks cited in objective K-1.3 seem to be appropriate as objectives for the students in the kindergarten class. The remaining tasks were, for the most part, accomplished at the time of the pre-testing. A consideration of raising the percentage of the class required to perform the objective should be made or parts of objective should be completely eliminated from the program, because the students have accomplished them before they entered the program.

Objective K-1.3P:

> The classroom teacher will evaluate each child individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

At the beginning of the school year children were evaluated individually and grouped for instruction. Teachers provided appropriate exercises for the accomplishment of objective K-1.3 with the following percentage of the required frequency:

December - 50%
January - 53%
February - 84%
March - 80%
April - 92%
May - 87%

It seems evident from these percentages that the performance of this activity occurred more frequently as the school year progressed. Although the teachers did not perform the activity at least once a week 100% of the time, the number of times they performed the activity seemed to be appropriate because objective K-1.3 was accomplished. A review of the proposed frequency of the process activity should be made and appropriate revisions implemented.

Objective K-1.4:

> At the end of the year 50% of the students will pronounce correctly all 220 Dolch basic words. This will be measured by teacher ratings and observer checklists.

Evaluation:

The students were required to repeat a sample of the ten words or phrases selected by the teachers from the Dolch basic words. The students received a score of "yes" they could pronounce all ten words correctly, or "no" they could not. A sign test for correlated data was performed to compare the pre-test scores; the results of this analysis are summarized in Table 44.

As shown in Table 44 the class tested accomplished the objective of pronouncing correctly the sample of Dolch basic words. Eighty-two percent could pronounce these words correctly on the pre-test, and 100% of the class could do the task on the

Table 44

Instructional Objective K-1.4
Summary of Sign Test for Correlated
Data and Percent at Criterion Level

Number with Pre and Post Scores	17
Number Showing Positive Change	3
Number Showing Negative Change	0
z	1.1547
p	not significant
% at Criterion-Pre	82
% at Criterion-Post	100

post-test. No significant difference existed between the pre-test and post-test scores, as shown in Table 44. A review of the testing for this particular objective suggests that perhaps a more difficult test should have been constructed which sampled more of the Dolch sounds. The evaluators recommend a review of the testing of this objective for the following year be done, as well as a consideration of increasing the criterion level of the objective be made. Objective K-1.4 was accomplished on both the pre- and post-tests.

Objective K-1.4P:

> The project director will provide classroom teachers with cards for the language master. Children will be provided individualized diagnosis by the teacher, and individualized drill time on the words they do not know at least once a week. The activities will be recorded in the lesson plan book.

Evaluation:

The project director provided classroom teachers with cards for the language master. Frequency of the usage of these cards can be determined by referring to the evaluation of equipment usage later in this report. Children were provided with individualized diagnosis by the teacher and individualized drill time on the words they did not know at least once a week for the following percentage of required time:

December	100%
January	93%
February	76%
March	85%
April	92%
May	82%

During each of the six months for which process was recorded at least 75% of the time required for this process activity was devoted to it. This performance of process seems sufficient to maintain the skills specified in product objective K-1.4.

Objective K-1.5:

> At the end of the year 50% of the students will pronounce correctly all 115 words usually found in pre-primers, given the word orally to be repeated to the teacher. This was measured by teacher ratings and observer checklists.

Evaluation:

Table 45 summarizes the results of the test of words found in pre-primers; a t-test for correlated data was used to compare the pre-test and post-test scores on this measure.

Table 45

Instructional Objective K-1.5
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 25

	Pre	Post
$\overline{X}$	6.0000	6.0000
SD	0.0000	0.0000
% at Criterion	100	100

Difference Between Means	0.0000
df	24
t	0.0000*

* Not Significant

The child was tested by being shown a picture and hearing the teacher pronounce the word it represented; the child was requested to repeat the word. A response was considered correct if it was an exact repetition of the word pronounced by the teacher. The children were presented with six cards; therefore, the highest possible score was six. On both pre- and post-tests all children tested answered all questions correctly; therefore, no significant difference existed between the pre-test and post-

101

test scores. The students' performance on this test suggested that the objective or the testing procedure was inappropriate, as 100% of the students could do the objective on both pre- and post-tests. The evaluator recommends that a review of objective K-1.5 occur, with emphasis on a determination of the appropriateness of the objective, and the testing procedures, objective K-1.5 was accomplished.

Objective K-1.5P:

> The oral approach will be used, supplemented for individual students with individualized drill on the language master. The project director will provide classroom teachers with language master cards with this array of words. The drills will be used at least once a week and recorded in the lesson plan book.

Evaluation:

A monitoring of individual classrooms indicated that the oral approach was used to maintain objective K-1.5, and that the teachers were provided with language master cards by the project director. These language masters were used for individualized drill with the students. A record of drill activities occurring at least once a week was made for the following percentage of the required frequency:

December - 2%
January - 62%
February - 76%
March - 55%
April - 46%
May - 51%

Because the corresponding product objective was accomplished at both testings, the impact and appropriateness of the process cannot be determined. The evaluators suggest that when a review of objectives K-1.5 is made to determine appropriateness, a review of objective K-1.5 should also occur.

Objective K-1.6:

> At the conclusion of the year 50% of the students will associate the nouns and verbs found in pre-primers with their corresponding pictures. Their abilities will be measured by teacher ratings and observer checklists.

Evaluation:

The students' ability to perform this objective was measured by having the teacher present them one picture card and three words. The students were asked to identify the word that matched the picture. The highest possible score on this test was three correct; a score of three was required to accomplish the objective. Table 46 summarizes the t-test for correlated data performed on the pre-test and post-test scores of this measure.

The results of this test show that 5% of the students performed at the appropriate level on the pre-test and only a slightly larger percentage, 10%, performed at the appropriate level on the post-test. Similarly, no significant difference existed between the pre-test scores and the post-test scores.

Table 46

Instructional Objective K-1.6
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 17

	Pre	Post
$\overline{X}$	0.5882	1.0000
SD	0.7714	0.9701
% at Criterion	5	10

Difference Between Means	0.4118
df	16
t	1.5150*

* Not Significant

This suggest the possibility that the objective was not appropriate for the students; the activity seemed to be too difficult for them. A review of the process might also give some indication of why the objective was not accomplished. The evaluators recommend a reconsideration of the appropriateness of this objective be made. Objective K-1.6 was not accomplished.

Objective K-1.6P:

> The project director will provide classroom teachers with certain pictures depicting the appropriate words. The teachers will provide practice in small groups at least once a week and record the activity in their lesson plan book.

Evaluation:

The following percentages indicate the percentage of time during which the teachers provided appropriate activities at least once a week:

December - 0%
January - 7%
February - 0%
March - 10%
April - 30%
May - 21%

A review of these percentages explains the lack of accomplishment of objective K-1.6. The teachers rarely performed activities directed at this objective. The evaluators suggest that a review be made of the appropriateness of both product and process objective K-1.6. This will determine whether the objective is inappropriate for the kindergarten children or if lack of process activities sufficiently explains its status.

Objective K-1.7:

> 25% of the students when read orally a story from a standard English pre-primer will orally be able to say at least two of the following: 1) Name of three main characters; 2) Two main ideas; 3) Conclusion. This will be measured by teacher ratings and observer checklist.

Evaluation:

Table 47 summarizes the analysis of the results of the test used to measure objective K-1.7; a t-test for correlated data was performed to compare the pre-test and post-test scores on this measure.

Table 47

Instructional Objective K-1.7
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 17		
	Pre	Post
$\overline{X}$	4.0508	4.9411
SD	0.9374	0.2360
% at Criterion	67	94

Difference Between Means	0.8823
df	16
t	4.2559*

* <.001

This objective was measured by reading the children the story "Little Duckling Tries His Voice" and asking a series of questions about it. The students were asked to name three of the characters the duckling met, to state the duckling's decision, and to explain the reason for this decision. The highest possible score on this test was five correct. A review of Table 47 indicates that 67% of the students could perform the objective on the pre-test, and 94% of the students could do so on the post-test; therefore, on both pre- and post-tests at least 25% of the students answered all questions correctly. In addition, a significant difference existed between the pre-test and post-test scores. These results suggest that perhaps the criterion level of 25% of the students is not appropriate.

Because a significant difference existed between the two sets of scores, the kindergarten program seemed to have some influence on the accomplishment of this objective. The criterion level seems too low. Objective K-1.7 was accomplished.

Objective K-1.7P

> The classroom teacher will evaluate each child individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

The teachers evaluated each child individually at the beginning of the year and grouped children for instruction; this was confirmed by classroom observation. The following percentages indicate the percent of time teachers provided appropriate activities at least once a week as specified in the process objective:

December - 83%
January - 92%
February - 76%
March - 80%
April - 76%
May - 40%

These generally high frequencies of performing the process activities stated in the objective suggest one reason for the significant difference between pre- and post-test scores. The frequent performance of the process suggests its importance to the kindergarten curriculum. This importance further indicates a need to revise the criterion level in the product objective K-1.7.

Objective K-1.8:

> 25% of the students when read orally a story from a standard English pre-primer will at the conclusion of the story be able to arrange a list of 3 activities in their proper sequence given the activities orally. This will be measured by teacher ratings and observer checklists.

Evaluation:

The ability of the students to do the activities specified in objective K-1.8 was tested by reading the students the story "Little Duckling Tries His Voice" and asking them to put in sequence five cards representing the individuals the duckling met on his walk. The highest possible score on this measure was five correct; a score of three correct was required to accomplish the objective. Table 48 presents the analysis, a t-test for correlated data of the test scores.

The results shown in Table 48 indicate that 50% of the students could sequence at least three activities properly on the pre-test, and 100% of the students could sequence at least three activities properly on the post-test. Both pre- and post-test percentages of students were higher than the criterion percentage of 25% required by the objective. Similarly, no significant difference existed between the pre- and post-test scores. A review of this data suggests that the

Table 48

Instructional Objective K-1.8
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 17		
	Pre	Post
$\overline{X}$	2.7647	5.0000
$\overline{SD}$	1.4360	0.0000
% at Criterion	50	100
Difference Between Means	2.2353	
df	16	
t	1.5566*	

* Not Significant

criterion level of objective K-1.8 was not appropriate as the students had accomplished it on the pre-test. Objective K-1.8 was accomplished.

Objective K-1.8P:

> The teacher will evaluate each child individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

Children in the kindergarten classes were evaluated informally or formally on their ability to sequence activities in a story at the beginning of the year. They were then grouped for instruction by the teachers. Appropriate exercises were provided at least once a week for the following percentage of time:

December - 33%
January - 77%
February - 76%
March - 15%
April - 76%
May - 47%

During three of the six months for which process was recorded, activities directed toward objective K-1.8 were performed three-fourths as often as specified. During three of the months, however, very few teachers performed activities related to objective K-1.8 as frequently as required. This perhaps explains the lack of significant difference between the pre-test and post-test scores. The evaluators suggest that a review be made of the process K-1.8 and the frequency at which it should be performed in addition to the appropriateness of product objective K-1.8.

Objective K-1.9:

> 25% of the students will be able to repeat correctly in proper English a five word sentence dictated in English by the teacher utilizing words from the Barbe and Dolch lists. This will be measured by teacher rating and observer checklist.

Evaluation:

The ability of students to repeat a five-word sentence was measured by having the child repeat such a sentence after the teacher. Five sentences were presented to the child; therefore, the highest possible score was five correct. Table 49 summarizes the t-test for correlated data done on these pre-test and post-test scores.

Table 49

Instructional Objective K-1.9
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 17

	Pre	Post
$\overline{X}$	4.4117	4.6470
SD	1.2395	0.7625
% at Criterion	72	77

Difference Between Means	0.2353
df	16
t	1.0008*

* Not Significant

The results shown in Table 49 indicate that approximately the same percentage of students could perform the objective on the pre-test and post-test, 72% and 77% respectively. Similarly, no significant difference existed between the pre-test and post-test scores. The ability of the students to repeat words stated by the teacher seemed to be a skill they possessed when they entered the classroom, as indicated their accomplishment of other similar objectives on the pre-testing. The evaluators recommend that a review be made of the appropriateness for kindergarten students of objectives involving repetition of words.

Objective K-1.9P:

> The classroom teacher will evaluate each child individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

Teachers performed appropriate activities for instructional objective K-1.9 the following percentage of the time required:

December - 33%
January - 61%
February - 30%
March - 65%
April - 92%
May - 57%

These percentages indicate that the teachers were generally not performing activities geared toward objective K-1.9 at least once a week. This may explain the lack of a significant difference between pre and post scores for the corresponding product objective, although the inappropriateness of the objective may be a better explanation.

Objective K-1.10:

> 25% of the students will be able to make up in English simple endings for stories dictated in English by the teacher. This will be measured by teacher ratings and observer checklists.

Evaluation:

In order to measure this objective the teacher read the story "The Strange Noise" to a group of students or to each student individually and asked each child to make up their own ending to the story. The students were rated as to whether they could or could not make up an appropriate ending to the story. Table 50 indicates that 68% of the students received a positive rating on the pre-test, and 95% received a positive rating on the post-test. A sign test for correlated data was performed between the pre-test and post-test ratings to determine if a difference between them existed; this analysis is summarized in Table 50.

Table 50 reports that a significant difference existed between the pre-test and post-test scores. These results suggest that the program had an impact on the students' ability to do the skill cited in objective K-1.10, and that the criterion level of the objective was probably too low. The evaluators suggest a review of the objective be made to determine the appropriateness of the criterion and appropriate changes implemented.

Table 50

Instructional Objective K-1.10
Summary of Sign Test for Correlated
Data and Percent at Criterion Level

Number with Pre and Post Scores	21
Number Showing Positive Change	7
Number Showing Negative Change	0
z	2.2677
p	<.05
% at Criterion-Pre	68
% at Criterion-Post	95

Objective K-1.10P:

The classroom teacher will dictate stories in English. Children in small groups will then be allowed to work out a story ending. Later in year students will each work out their story endings. These activities will be recorded at least once a week and recorded in the lesson plan book.

Evaluation:

Classroom teachers dictated stories in English and had students work out story endings at least once a week for the following percentage of required time:

December - 50%
January - 38%
February - 69%
March - 60%
April - 92%
May - 57%

Generally, the teachers were doing process activity K-1.10P at least one-half as frequently as they should have been. This seemed to be a sufficient frequency of process since a significant difference existed between the pre-test and post-test scores.

Objective K-2.1:

> 100% of the students will develop tactual perception to the point that they can distinguish by touch differences in texture, hardness, size. Their skills will be measured by teacher rating and observer checklists.

Evaluation:

The tactual perception skills of the children were measured in the following way: the student was blindfolded; two objects were placed in front of him; he was requested to compare them in terms of either hardness, size or weight; four such pairs of objects were presented yielding a possible score of four correct. Table 51 summarizes the comparison of the pre-test and post-test scores through a t-test for correlated data.

The data summarized in Table 51 report that on the pre-test 94% of the students answered all questions correctly, and on the post test 100% of the students answered all questions correctly. Therefore, only on the post-test did the class meet the criterion level of 100% specified in the objective. Because of the high mean pre-test score, however, no significant difference

Evaluation:

The teachers did prepare "Surprise Boxes" and used these boxes at least once a week for the following percentage of the required time:

December - 83%
January - 69%
February - 76%
March - 80%
April - 84%
May - 70%

Almost three-fourths of the time during which such activities were supposed to occur did they actually occur at least once a week. This frequency suggests the appropriateness of process K-2.1P for achieving K-2.1 and also the importance of this activity as part of the curriculum.

Objective K-2.2:

> 80% of the children will correctly complete activities involving the following visual perception skills: left-right progression, utilization of peripheral vision, focusing the eyes with head in motion, focusing the eyes with head stationary, following regular movements, following irregular movements. These abilities will be measured by teacher rating and observer checklists.

Evaluation:

This objective was measured by a series of tasks involving movement and location of plastic toy cards and straws. Each of the six questions tested one of the visual skills

Table 51

Instructional Objective K-2.1
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 17

	Pre	Post
$\overline{X}$	4.0000	4.0000
SD	0.0000	0.0000
% at Criterion	94	100

Difference Between Means	0.0000
df	16
t	0.0000*

* Not Significant

existed between the pre-test scores and the post-test scores. Objective K-2.1 would seem to be an appropriate objective because only on the post-test was the criterion level met; however, the evaluator suggests that a review of the objective occur because of the high score received on the pre-test by so many of the program participants. Objective K-2.1 was accomplished.

Objective K-2.1P:

> Process. The teacher will prepare "Surprise Boxes" with a hole for inserting the hand. Inside the box will be three objects of different hardness or texture, etc. The child will be asked by touch to identify and remove the softest, etc. These activities will be performed at least once a week and recorded in the lesson plan book.

specified in the objective. The results in Table 52 summarize the analysis of scores of the students on this objective; a t-test for correlated data was used to compare pre-test and post-test scores. In order to accomplish the objective, students were required to receive a score of six correct out of six possible points.

Table 52

Instructional Objective K-2.2
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 17

	Pre	Post
$\overline{X}$	4.7647	5.2941
SD	0.8764	0.6655
% at Criterion	11	41

Difference Between Means	0.5294
df	16
t	2.0455*

* Not Significant

Table 52 indicates that 11% of the students received a score of six on the pre-test, and 41% of the students received a score of six on the post-test; no significant difference existed between the pre-test and post-test scores. These results suggest that the process for accomplishing objective K-2.2 was either not appropriate or was not performed with satisfactory frequency. Review of the evaluation of process K-2.2P may indicate which situation existed. The evaluators also suggest that a review of objective K-2.2 should occur, with consideration of the appropriateness of the 80% criterion level specified in the objective. Objective K-2.2 was not accomplished.

Objective K-2.2P:

> The classroom teacher will evaluate each child individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

Each child was evaluated individually at the beginning of the year, and children were grouped for instruction by the teachers. Appropriate exercises were provided at least once a week during the following percentage of time:

December - 66%
January - 84%
February - 92%
March - 95%
April - 84%
May - 80%

The high percentage of performing the process activity specified in the objective suggest that either a marked increase in frequency of activity per week should occur or the appropriateness of the particular activities should be assessed. If indeed these activities were appropriate for the product objective, then some change in the product objective criterion level may be the appropriate action.

Objective K-2.3:

> 80% of the children will complete activities involving the following perceptual constancy skills: same size, different size, sorting by size, same shape, sorting according to shape. This will be measured by teacher ratings and observer checklists.

Evaluation:

Objective K-2.3 was measured by placing a series of circles and squares in front of the child and having him identify those that were the identical in size, different in size, identical in shape, different in shape, and by having him sort them by size and by shape. The highest possible score a child could receive was five correct, the score necessary to accomplish the objective. Table 53 indicates the results of this test and summarizes the t-test for correlated data performed on the two sets of scores.

The results shown in Table 53 indicate that 53% of the students could perform objective K-2.3 on the pre-test, and 82% of the students could perform it on the post-test. The post-test percentage exceeds the 80% required by the objective; therefore, objective K-2.3 was accomplished. However, no significant difference existed between the pre-test and post-test scores. This suggest that a review of the ability of the

Table 53

Instructional Objective K-2.3
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 14	Pre	Post
X	4.3571	4.7857
SD	1.2877	0.4103
% at Criterion	53	82

Difference Between Means	0.4286
df	13
t	1.3857*

* Not Significant

measure used to discriminate between students who can do the objective should be considered. In addition, a separate measure of the students' abilities to do the five different perceptual constancy skills should be explored during the next program year. Objective K-2.3 was accomplished.

Objective K-2.3P:

> The classroom teacher will evaluate each child individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

Observation of classes and reports from classroom teachers indicated that students were evaluated individually at the beginning of the year on this ability and grouped for instruction. Teachers provided appropriate exercises and opportunities to perform at least once a week for the following percentage of weeks:

December - 33%
January - 46%
February - 76%
March - 75%
April - 84%
May - 70%

These percentages suggest that as the program progressed the process activity was done with greater frequency. During the latter months it was performed with three-fourths the anticipated frequency. However, the fact that objective K-2.3 was accomplished verifies the appropriateness of objective K-2.3P and the appropriateness of the frequency with which it was performed.

Objective K-2.4:

> 80% of the children will complete activities involving the following spacial skills: behind, over, beside, under, inside. This will be measured by teacher rating and observer checklist.

Evaluation:

Table 54 presents the results of the measurement of objective K-2.4; a t-test for correlated data was used to compare the pre-test and post-test scores.

Table 54

Instructional Objective K-2.4
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 17

	Pre	Post
$\overline{X}$	1.5294	2.8235
SD	1.0910	1.8225
% at Criterion	5	21

Difference Between Means	1.2941
df	16
t	3.0328*

* <.01

This objective relating to acquisition of spacial relationship concepts was tested by having the students place a popsicle stick in a series of five positions in relationship to the cup. The highest possible score a student could receive was five. The results shown in Table 54 indicate that 5% of the students could do the required tasks on the pre-test, and 21% of the students could do the required tasks on the post-test. The post-test percentage did not reach that specified in the objective; however, a significant difference existed between the pre-test and post-test scores. These results suggest that the criterion percentage of 80% for this objective may be too high for this student population. The evaluators suggest that a review of objective K-2.4 occur. Objective K-2.4 was not accomplished.

Objective K-2.4P:

> The classroom teacher will evaluate each child individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

Children were individually evaluated and grouped for instruction at the beginning of the year. The occurrence of this procedure was confirmed by interviews with teachers and classroom observation. Teachers provided appropriate exercises for the accomplishment of objective K-2.4P at least once a week during the following percentage of time:

December - 50%
January - 61%
February - 53%
March - 70%
April - 84%
May - 68%

These percentages indicate that the teachers were performing appropriate activities at least once a week during one-half to three-fourths of the time. Because a sufficient percentage of students did not achieve the objective even though a significant difference existed between the pre-test and post-test scores, the evaluators conclude that process activity K-2.4 was appropriate, but was not performed with satisfactory frequency.

Objective K-2.5:

> 100% of the children will develop their sense of smell to the point that they can distinguish and correctly identify boxes covered with cheesecloth which contain onions, potatoes, celery, apples, ripe bananas, and oranges. This will be measured by teacher ratings and observer checklists.

Evaluation:

In order to measure objective K-2.5 students were asked to select from six bottles those three pairs of bottles which had identical scents; therefore, the highest possible score a student could receive was three correct. Table 55 summarizes the analysis of these test results; a t-test for correlated data was performed to compare the pre-test and post-test scores.

The results shown in Table 55 indicate that 47% of the students could perform the activities specified in this objective on the pre-test, and a larger percentage, 64%, could perform the specified activities on the post-test. The post-test criterion was not accomplished, however, as 64%, less than the required 100%, of the students performed satisfactorily. No significant difference existed between the pre-test and post-test scores. These results suggest that the process used for teaching the objective or the test used to measure it may not have been appropriate. A review of the scents used in measuring this objective indicate the scents of peppermint, perfume, and antiseptic which the students were required to identify were not those specified in the original objective. The evaluators suggest that the

Table 55

Instructional Objective K-2.5
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 15

	Pre	Post
$\overline{X}$	1.9019	2.3215
SD	1.6527	2.1233
% at Criterion	47	64

Difference Between Means	0.4196
df	14
t	0.6628*

* Not Significant

teachers refer to the original objective and determine if it is appropriate. A review of the process should also be made and appropriate changes implemented. Objective K-2.5 was not accomplished.

Objective K-2.5P:

> The project director will provide teachers with 30 cardboard boxes (shoe boxes) which have a hole cut in the cover which is covered with cheesecloth. The teacher will make up sets of boxes, each set containing five boxes, each with a different material inside. Students will be grouped, each group receiving a set of boxes. This activity will be performed at least every two weeks. The activities will be recorded in the lesson plan book.

Evaluation:

The project director did not provide the teachers with the cardboard boxes specified in the objective, because teachers already had similar boxes with different materials inside. Substitution for the specified materials explains the substitution of the different set of materials for those specified in objective K-2.5. The set of materials selected by the teachers to test were also those used in the activities specified in objective K-2.5P, which were performed at least every 2 weeks for the following percentage of available time:

December - 2%
January - 46%
February - 53%
March - 40%
April - 38%
May - 32%

These percentages indicate that activities directed toward objective K-2.5 were not performed with even one-half of the specified frequency. The evaluators recommend that the project staff review objectives K-2.5 and K-2.5P to determine their appropriateness and to consider which materials should be used as the focus for developing this sense of smell.

Objective K-2.6:

> 75% of the children will by the end of the year have developed their gross motor skill as demonstrated by their ability to perform 50% of the following activities: regaining an upright position from sitting position; lying on backs; lying on stomachs; crawling; skipping; galloping; hopping; balancing. This will be measured by teacher ratings and observer checklists.

Evaluation:

In order to measure objective K-2.6 the students were asked to perform each of the motor-coordination skills specified in the objective. Because they were asked to demonstrate seven different skills, the highest possible score they could receive was seven correct.

Table 56

Instructional Objective K-2.6
N, $\overline{X}$, SD, % At Criterion and t-ratio

N= 17

	Pre	Post
$\overline{X}$	4.1764	6.2352
SD	2.1485	1.4657
% at Criterion	58	52

Difference Between Means	2.0588
df	16
t	2.0588*

* Not Significant

Table 56 summarizes the results of this seven-question test; a t-test for correlated data was used to analyze the two sets of scores. Students were required to receive a score of four, or 50% of the activities, to satisfy the objective. The table shows that 58% of the students received appropriate scores on the pre-test; only 52% of the students received appropriate scores on the post-test. No significant difference existed between the pre-test and post-test scores. The 52% of students who achieved the objective on the post-test was too low for the objective to be accomplished because it specified a 75% criterion level. In spite of the fact that a smaller percentage of students reached the performance level on the post-test than on the pre-test, the mean score on the post-test was higher than on the pre-test. This suggests that a wide range of scores, four to seven correct, which students could receive to accomplish the objective did not sufficiently discriminate between students with different abilities. The evaluator recommends that the program review this objective and determine the appropriateness of the criterion percentages in the objective.

Objective K-2.6P:

> The classroom teacher will evaluate each child individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

Classroom teachers evaluated each child individually, either formally or informally at the beginning of the year and grouped them for instruction. They performed appropriate activities for the accomplishment of objective K-2.6 at least once a week during the following percentage of available time:

December - 66%
January - 92%
February - 92%
March - 100%
April - 100%
May - 82%

The high frequency of performance of the process activity suggests that the particular activities may not have been appropriate for the accomplishment of objective K-2.6. The evaluators suggest that a review be made of process used in each kindergarten classroom for the achievement of objective K-2.6.

Objective K-2.7:

> 50% of the children by the end of the year will have developed their fine motor coordination, as demonstrated by their ability to perform three of the followng five activities: cutting, placing and tracing, buttoning, zipping. Their abilities will be measured by teacher rating and observer checklist.

Evaluation:

Table 57 summarizes the analysis of the t-test for correlated data performed on the results of the testing for objective K-2.7.

Students were tested on this objective by being insturcted to draw several geometric figures, to cut them out of a piece of construction paper, to button a shirt, and to zip a jacket on the board. The highest possible score a student could receive was four correct. Students were required to earn a score of three to accomplish the objective. Table 57 indicates that

Table 57

Instructional Objective K-2.7
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 18

	Pre	Post
$\overline{X}$	3.6666	4.0000
SD	0.4715	0.0000
% at Criterion	100	100

Difference Between Means	0.3334
df	17
t	0.7071*

* Not Significant

100% of the students could accomplish the objective on the pre-test, and 100% of the students could accomplish the objective on the post-test. These percentages suggest that this objective is not appropriate for the kindergarten children as all students possessed this ability when they entered the classroom. No significant difference existed between the pre-test and post-test scores. The evaluators suggest that this objective be eliminated from the project because of the ability of the children to do it when they entered kindergarten. Objective K-2.7 was accomplished.

Objective K-2.7P:

> The classroom teacher will evaluate each child individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and oppotunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

Students were evaluated individually at the beginning of the year and grouped for instruction. Discussion with teachers and classroom observation confirmed the occurrence of these activities. Teachers provided appropriate exercises for the skills required in objective K-2.7 at least once a week for the following percentage of time:

December	- 100%
January	- 100%
February	- 100%
March	- 100%
April	- 100%
May	- 84%

The fact that these teachers performed process K-2.7P as frequently as they did suggests that these activities may have reinforced the abilities possessed by the students when they entered kindergarten. It is questionable whether such a high frequency of performing there activities was required, although these activities most probably occurred informally during other instruction. This can only be answered by reviewing both product and process objective K-2.7. The evaluators recommend that such a review occur.

Objective K-3.1:

Given a worksheet containing three sets, two of which are identical 100% of the students will correctly place the identical members in a one to one correspondence by linking them with a line.

Evaluation:

This objective was assessed by placing three sets of objects on a felt board, two of which were identical, and asking the child to link the two identical sets with yarn. The highest possible score a child could earn was two correct.

Table 58

Instructional Objective K-3.1
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 20

	Pre	Post
$\overline{X}$	1.0000	1.7000
SD	0.8366	0.4582
% at Criterion	33	71

Difference Between Means	0.7000
df	19
t	3.1988*

* <.01

Table 58 indicates that 33% of the students received a score of two required by the criterion specified in the objective on the pre-test, and 71% of the students obtained such a score on the post-test. Neither on the pre-test nor the post-test did a sufficient percentage of students achieve the objective to satisfy the 100% criterion level. However, it should be noted, as summarized in Table 58, a t-test for correlated data between pre and postt scores showed a significant difference existed between the scores, a difference which could have occurred by chance less than one time in 100. The result suggests that, in spite of the fact that the criterion level of the objective was not accomplished, the program did have some impact on the students' abilities to identify like sets. The evaluators recommend, based on this evidence, that the project review the appropriateness of the criterion specified in this objective. Objective K-2.1 was not accomplished.

Objective K-3.1P:

> Process. The students will be provided by the teacher with the worksheet containing three pictures in each example. The student will link the matching pictures with a line. This activity will occur at least once a week and will be recorded in the lesson plan book.

Evaluation:

The teachers provided the students with worksheets containing three pictures in each example. The students were required to link identical pictures with a line. The frequency with which this activity was performed at least once a week was as follows:

December - 83%
January - 52%
February - 52%
March - 70%
April - 76%
May - 57%

These percentages suggest that generally three-fourths of the time specified for objective K-3.1P was actually devoted to it. However, because they were not doing the process as frequently as they should have been may explain the lack of accomplishment of the corresponding product objective. The appropriateness of the process activities performed seems evident from the fact that a significant difference between the pre- and post-test scores of objective K-3.1 occurred. The evaluators recommend that the project review the frequency of process K-3.1 and for 1971-72 consider performing it more frequently than during the current project year.

Objective K-3.2:

> Given a diagram containing a representation of a number 0-10, 50% of the class will 80% of the time be able to orally name the corresponding number. This will be measured by teacher rating and observer checklist.

Evaluation:

Table 59 shows the results of the evaluation of objective K-3.2; a t-test for correlated data was used to compare the pre-test and post-test scores.

Table 59

Instructional Objective K-3.2
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 17

	Pre	Post
$\overline{X}$	9.1176	10.6470
SD	2.4467	0.5887
% at Criterion	56	70

Difference Between Means	1.5294
df	16
t	2.8894*

* <.05

Students were tested by being required to orally name the number of objects in a set on the blackboard; each set contained between one to ten objects; therefore, the highest possible number of items a student could answer correctly was eleven. The results shown in Table 59 indicate that 56% of the students achieved the criterion percentage of 80% correct identification, or nine correct, on the pre-test; 70% of the students did so on the post-test; therefore, both on the pre-test and post-test a sufficient percentage of the class accomplished the objective. Objective K-3.2 was, therefore accomplished. Similarly, a significant difference existed between the pre-test and post-test scores. A difference so great as the one obtained could have occured by chance less than one time in 100. This finding suggests that participation in the program contributed to the accomplishment of objective K-3.2 by a larger percentage of students than required in the objective. The evaluators suggest that the project review the criterion percentage established in the objective and consider raising it.

Objective K-3.2P:

> The classroom teacher will evaluate each child individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

The classroom teacher evaluated each child individually at the beginning of the year and grouped children for instruction. This was confirmed by classroom observation and teacher interviews. Appropriate exercises were provided at least once a week with the following frequency:

December	- 100%
January	- 100%
February	- 100%
March	- 95%
April	- 100%
May	- 85%

The fact that process K-3.2 was performed with such high frequency explains the significant difference between pre-test and post-test scores on the corresponding product objective.

Objective K-3.3:

90% of the students will understand the number concepts 0 to 10. This will be measured by teacher rating and observer checklist.

Evaluation:

Students were asked to draw objects representing the numbers 0 to 10 on a sheet of paper. The highest possible score that the student could receive was eleven correct. A t-test for correlated data was used to compare the pre-test and post-test scores; this analysis is summarized in Table 60.

Table 60

Instructional Objective K-3.3
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 17

	Pre	Post
$\overline{X}$	8.7058	10.0000
SD	2.2167	0.0000
% at Criterion	61	100

Difference Between Means	1.2942
df	16
t	0.5838*

* Not Significant

Table 60 reports that 61% of the students could do objective K-3.3 on the pre-test; 100% of the students could perform it on the post-test. The criterion of 90% of the class which had to perform the objective was thus reached during the program year. A significant difference did not exist between the pre-test and post-test scores, suggesting that the students performed quite well on the pre-test, but did not receive the perfect score that was required for accomplishment of the objective. Objective K-3.3 was accomplished.

Objective K-3.3P:

> The classroom teacher will evaluate each child individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. The activities will be recorded in the lesson plan book.

Evaluation:

Children were individually evaluated either formally or informally at the beginning of the classroom instruction and grouped for instruction. Appropriate exercises were provided at least once a week for the following percentage of available time:

December - 66%
January - 77%
February - 76%
March - 90%
April - 100%
May - 81%

The fact the product objective K-3.3 was accomplished suggests that this frequency of performance of the process was satisfactory. Similarly, the activities included in this process seemed appropriate for the accomplishment of the corresponding product objective.

Objective K-3.4:

> Given a visual representation showing the pattern of a given series of objects, 90% of the class will be able to correctly draw the next object in the series 80% of the time. This will be measured by teacher rating and observer checklist.

Evaluation:

This objective was tested by having the teacher place three patterns of circles and squares on the board and asking the child to finish each pattern; the highest possible score a student could receive was three correct. Since he had to perform the activity 80% of the time, in order to satisfy the criterion the student had to recrive a perfect score of three to accomplish the objective. The results shown in Table 61 summarize the t-test for correlated data performed on the scores.

Table 61 notes that 47% of the students received a score of three on the pre-test, and 73% of the students received it on the post-test, too low a percentage to satisfy the objective. A significant difference did exist between the pre-test scores and post-test scores. This suggests that perhaps a review of

Table 61

Instructional Objective K-3.4
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 17

	Pre	Post
$\overline{X}$	2.1176	2.6470
SD	1.0782	0.8361
% at Criterion	47	73

Difference Between Means	0.5294
df	16
t	2.3158*

* <.05

the required criterion level should be considered; 90% may be too high. Objective K-3.4 was not accomplished.

Objective K-3.4P:

> The classroom teacher will evaluate each child individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

Observations of classrooms confirmed that each teacher evaluated their students individually and grouped the children for instruction. They provided appropriate exercises for the accomplishment of objective K-3.4 at least once a week for the following percentages of required time:

December - 50%
January - 61%
February - 100%
March - 80%
April - 84%
May - 55%

During the second part of the school year, the teachers did the process with varying frequencies. This may explain the difference between pre- and post-test scores and the failure to achieve the criterion. Activities may have been appropriate, but not performed frequently enough. A review should be made of these possibilities.

Objective K-3.5:

> Given two sets of objects containing 1 to 10 items, 90% of the class will be able to combine the sets and orally name the correct number of objects in the new set 90% of the time. This will be measured by teacher ratings and observer checklists.

Evaluation:

This objective was measured by placing a set of blocks in front of the child, then adding to or subtracting from the blocks in the set and requiring the student to name the number of blocks in the new set. This activity was repeated ten times with different sets so that the highest possible score which could be obtained by the student was ten.

Table 62

Instructional Objective K-3.5
N, $\bar{X}$, SD, % at Criterion and t-ratio

N= 19

	Pre	Post
$\bar{X}$	7.2105	9.5789
SD	3.7074	1.3886
% at Criterion	63	90

Difference Between Means	2.3684
df	18
t	2.9110*

* $<.01$

Table 62 summarizes the t-test for correlated data done on the scores on this test. The results for this objective indicate that 63% of the students received the score of nine or ten required by the objective on the pre-test, and 90% of the students received the required score on the post-test. The percentage of the class who accomplished the objective on the post-test was at the criterion level specified in the objective; therefore, objective K-3.5 was accomplished. Similarly, a significant difference existed between the pre-test and post-test socres; this difference which could have occurred by chance less than one time in 100. The results for this objective indicate its appropriateness for inclusion in the kindergarten instructional program.

Objective K-3.5P:

The classroom teacher will evaluate each student individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

At the beginning of the year each child was evaluated individually, and the class was organized into groups for instruction. Teachers provided appropriate exercises at least once a week for the following percentages of the time:

December - 83%
January - 84%
February - 53%
March - 80%
April - 100%
May - 58%

Since objective K-3.5 was accomplished the frequency and appropriateness of process K-3.5P was evidenced. Although teachers generally did not always perform the activities once a week, the frequency with which they were performed seemed sufficient; perhaps the frequency of process in this case should be more flexible in next year's process objective.

Objective K-3.6:

Given a set of objects containing 2 to 10 objects and directed to remove a stated number of objects, 90% of the students will be able to separate the set and orally name the correct number of objects in the new set. This will be measured by teacher rating and observer checklists.

Evaluation:

Students were given nine tasks involving either addition or subtraction of a certain number of marbles from a set displayed on the abacus. After the additon or subtraction activity had been performed, the student was requrest to orally name the number of marbles left in the new set. The highest possible score in this activity was nine correct. A t-test for correlated data summarized in Table 63 was used to compare the pre-test and post-test scores.

Table 63

Instructional Objective K-3.6
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 14

	Pre	Post
$\overline{X}$	7.2857	8.5714
SD	2.8139	0.9036
% at Criterion	59	82

Difference Between Means	1.2857
df	13
t	1.8614*

* Not Significant

Table 63 indicates that 59% of the students received a score of nine required by the objective on the pre-test, and 82% of the students received an appropriate score for accomplishing the objective on the post-test. The 82%, however, was not sufficiently high to consider the objective accomplished. Similarly, a significant difference did not exist between the pre-test and post-test scores. The evaluators suggest that a refocusing of this objective occur, with consideration of the appropriateness of the specified criterion level. A review of the process should also be considered in determining its appropriateness as an explaination for the lack of change of growth in this objective. Objective K-3.6 was not accomplished.

Objective K-3.6P:

> The classroom teacher will evaluate each child individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

The classroom students were evaluated individually at the beginning of the year and organized into groups for instruction. Appropriate exercises were provide at least once a week during the following percentage of the required time:

December - 66%
January - 52%
February - 61%
March - 70%
April - 69%
May - 41%

The fact that product objective K-3.6 was not accomplished suggests that the frequency with which this process activity was performed was not satisfactory. Another possibility was that the activities involved in this process were not appropriate. A review of the process used for accomplishing objective K-3.6 should be undertaken, and appropriate revisions made for the next program year.

Objective K-3.7:

> Given an array of geometric shapes, circles, triangles, and rectangles, 80% of the students will be able, given the name of a shape, to remove from the set all matching shapes 90% of the time. This will be measured by teacher rating and observer checklists.

Evaluation:

This objective was tested by providing the students with an envelope containing an array of circles, triangles, rectangles, and squares. The teacher named the shape and asked the child to remove from the set all matching shapes for the one named. The highest possible score a student could receive was four. Table 64 summarizes the results of the analysis of these test scores a t-test for correlated data.

The results shown in the Table 64 indicate that on the pretest 61% of the students received a score of four required by the objective, while on the post-test 96% of the students received the required score of four. This percentage on the post-test was

Table 64

Instructional Objective K-3.7
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 18

	Pre	Post
$\overline{X}$	3.0000	3.9444
SD	1.3743	0.2293
% at Criterion	61	96

Difference Between Means	0.9444
df	17
t	3.0722*

* <.01

sufficient to consider the objective accomplished. Similarly, a significant difference existed between the pre-test and post-test scores, a difference which could have occurred by chance less than one time in 100. These results suggest that the instruction during the kindergarten year contributed to the accomplishment of this objective by the kindergarten students. Objective K-3.7 as stated seems to be an appropriate one for the kindergarten group. Objective K-3.7 was accomplished.

Objective K-3.7P:

> The project director will provide each teacher with sets of geometric shapes. The teacher will provide appropriate practice at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

A set of geometric shapes was not provided for the teachers by the project director because each classroom already had a set of such shapes. The teachers provided appropriate practice at least once a week for the following percentage of available time:

December - 66%
January - 61%
February - 53%
March - 75%
April - 92%
May - 50%

These percentages show that the teachers were performing appropriate activities for one-half to nine-tenths of the required time. This seems to be an appropriate frequency for the performance of the process activities because the product objective K-3.7 was accomplished and because a significant difference existed between the pre-test and post-test results. Similarly, the activities used in the classrooms seemed to be appropriate for attaining the objective.

Objective K-3.8:

> Shown a geometric shape, circles, triangles, and rectangle, 80% of the students will be able to state orally its name. This will be measured by teacher ratings and observer checklist.

Evaluation:

In order to measure objective K-3.8, the students were shown a series of four flash cards which pictured a circle, triangle,

Table 65

Instructional Objective K-3.8
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 13

	Pre	Post
$\overline{X}$	2.7692	3.3846
SD	1.0490	0.6248
% at Criterion	24	52

Difference Between Means	0.6154
df	12
t	2.8891*

* <.05

rectangle, and square respectively. The student was asked to name the shape pictured on the flash card. Table 65 shows that 24% of the students could do this task on the pre-test, while 52% of the students could do this activity on the post-test. Neither percentage was sufficient to consider objective K-3.8 accomplished. However, the t-test for correlated data summarized in Table 65 reported that a significant difference existed between the pre-test and post-test scores, suggesting that the criterion level established for this objective may be too high. The evaluators suggest that a review of objective K-3.8 occur, with emphasis on a determination of the appropriateness of the criterion level of 80%.

Instructional Objective K-3.8P:

> Appropriate practice in large groups followed by individualized instruction on the language master. The teacher will develop the language master cards. Practice will be provided at least once a week. Activities will be recorded in the lesson plan book.

Evaluation:

Appropriate practice in large groups followed by individualized instruction was provided at least once a week for the following percentage of available time:

December - 83%
January - 69%
February - 61%
March - 85%
April - 92%
May - 67%

These percentages do not seem to be sufficient for the accomplishment of the objective. The appropriateness of the activities, however, are suggested by the fact that a significant difference existed between the pre-test and post-test scores. The degree of individualization of instruction seemed to vary, as indicated by the differing frequency of use of the language master cards (refer to evaluation of equipment usuage below). The evaluators recommend that a review of process K-3.8P occur, emphasizing a consideration of the frequency and appropriateness of the actual process activities.

Objective K-3.9:

> Given a set of objects containing items of different sizes or shapes or weight, 100% of the children will be able to differentiate the sizes and shapes and weights. This will be measured by teacher rating and observer checklists.

Evaluation:

The children were presented with a series of objects which were each weighed on the scale; then the child was asked to identify the heaviest object. The highest possible score a child could receive was five correct; this score was required for the child to satisfy the objective. The results of a t-test for correlated data comparing the pre- and post-test scores are summarized in Table 66.

Table 66 notes that 44% of the children received a satisfactory score on the pre-test, while 100% of the children received an appropriate score on the post-test. Objective K-3.9 was accomplished. Similarly, a significant difference existed between the pre-test and post-test scores; such a difference could have occurred by chance less than one time in 1,000. These results suggest that objective K-3.9 is appropriate for the kindergarten group and for the kindergarten program of instruction. The expected criterion level of 100% also seems to be appropriate. The evaluator recommends that this objective be included in its present form as part of the instructional program for the next program year.

Table 66

Instructional Objective K-3.9
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 24

	Pre	Post
$\overline{X}$	3.9166	4.9166
SD	1.3203	0.4000
% at Criterion	44	100
Difference Between Means		1.0000
df		23
t		4.0338*

* <.001

Objective K-3.9P:

> The classroom teacher will evaluate each child individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

At the beginning of the year children were individually tested on their ability to discriminate objects according to weight and shape. Children were then grouped for instruction. Appropriate exercises were provided at least once a week for the following percentage of time:

December - 50%
January - 77%
February - 61%
March - 75%
April - 76%
May - 51%

These percentages indicate that, for the most part, activities were performed at one-half of the anticipated frequency. The fact that objective K-3.9 was accomplished and that a significant difference existed between the pre-test and post-test scores for that objective suggests that the procedures and frequency of use of these procedures for accomplishing those objectives were appropriate.

Objective K-3.10:

> Given a pictorial representation of a clock, 80% of the children will be able to state orally the correct time ot the hour. Their skills will be measured by teacher rating and observer checklists.

Evaluation:

The students were presented with a demonstration clock. The teachers fixed the hands at a certain hour time. The child was then asked to identify the time correct to the hour. This exercise was repeated with five different times; therefore, the highest score was five. The students were required to answer all questions correctly to accomplish the objective.

Table 67 notes that on the pre-test 16% of the participants could identify the correct time to the hour, and on the post-test

Table 67

Instructional Objective K-3.10
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 24

	Pre	Post
$\overline{X}$	1.9583	4.5000
SD	1.8591	1.0000
% at Criterion	67	76

Difference Between Means	2.5417
df	23
t	7.2454*

* <.001

76% of the participants could do this activity. This percentage was not sufficient for the achievement of the objective. It seems possible that the required percentage of 80% was not appropriate, as a significant difference existed between the pre-test and post-test scores as shown in the t-test for correlated data summarized in Table 67. A difference this large could have occurred by chance less than one time in 1,000. The evaluators suggest that the project staff review the criterion level specified in objective K-3.10 and determine if it is appropriate or too high. Objective K-3.10 was not accomplished, although some form of it does seem to be an appropriate objective for inclusion in the kindergarten component. A significant gain in the ability to identify time occurred.

Objective K-3.10P:

> The classroom teacher will evaluate each child individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform it at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

The testing of children and grouping for instruction as specified in objective K-3.10P occurred at the beginning of the school year. This process was observed by the evaluator during on-site visits and in interviews with the teachers. Appropriate exercises and opportunities to perform the process for this objective were provided at least once a week for the following percent of time:

December - 0%
January - 15%
February - 30%
March - 20%
April - 30%
May - 7%

These percentages are quite low as compared to the 100% performance which should have occurred. The fact that the criterion level was not accomplished, but that a significant difference existed between the pre-test and post-test scores, suggests that the procedures used were appropriate, but that they were not performed with satisfactory frequency; this conclusion is confirmed by the percentages cited above. The evaluators recommend that an attempt be made to perform the processes specified for objective K-3.10P with the frequency required, at least once a week, rather than with the frequency that they were performed during this school year less than one-fifth of the specified time. This emphasis should contribute to the accomplishment of the objective K-3.10.

Objective K-3.11:

> Given a set of coins containing pennies, dimes, and nickels, 90% of the children will be able to identify orally each coin by name. This will be measured by teacher and observer checklist.

Evaluation:

The student was tested on this objective by being shown a penny, a dime, and a nickel and required to orally identify the name of each coin. The highest possible score a student could receive was three correct; this score was required to accomplish objective K-3.11. A t-test for correlated data was used to compare the pre-test and post-test scores, as summarized in Table 68.

Table 68 indicates that 19% of the class satisfied this objective on the pre-test, and 85% satisfied it on the post-test. However, this percentage of the class was not sufficient for the program to accomplish the objective. It should be noted that a significant difference existed between the pre-test and post-test scores at the .001 level. These results imply that this objective was appropriate for the kindergarten children and some progress toward its accomplishment was made. A review of the process

Table 68

Instructional Objective K-3.11
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 21

	Pre	Post
$\overline{X}$	1.2380	2.7619
SD	1.2380	0.6097
% at Criterion	19	85

Difference Between Means	1.5239
df	20
t	6.7819*

* <.001

directed toward this objective may indicate why more of the students did not accomplish the objective.

Objective K-3.11P:

> The classroom teacher will evaluate each child individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

Evaluation of student abilities was undertaken at the beginning of the year on an individual basis. Students were then grouped for instruction. The following percentages indicate what part of the time appropriate activities were provided at least once a week:

December - 46%
January - 33%
February - 38%
March - 50%
April - 30%
May - 15%

The fact that none of these percentages approached 100% suggests that processes directed toward product objective K-3.11 were not being performed with satisfactory frequency. The fact that the criterion level specified in the objective was not accomplished further supports this conclusion. The significant difference between pre-test and post-test scores on the product objective suggests that the activities being performed for process K-3.11P were appropriate, but were just not occurring with sufficient frequency. The evaluators recommend that if product objective K-3.11 is included in 1971-72 project an attempt should be made to structure activities on a more frequent basis.

Objective K-4.1:

> The student will demonstrate a comfortableness with French in the classroom as demonstrated by 50% of the class showing willingness to participate at least once in class discussion. This will be recorded by observer checklists.

Evaluation:

In order to determine the comfortableness with French of the students in the classroom the teacher organized a discussion in

French about the topic "The Family" and asked a series of six questions related to this topic. The teacher recorded for each child if he talked in French at any time during the conversation. The child, therefore, received either a positive score or a negative score; a sign test for correlated data was used to compare the pre and post scores, as summarized in Table 69.

Table 69

Instructional Objective K-4.1
Summary of Sign Test for Correlated
Data and Percent at Criterion Level

Number with Pre and Post Scores	21
Number Showing Positive Change	5
Number Showing Negative Change	0
z	1.7889
p	not significant
% at Criterion-Pre	57
% at Criterion-Post	80

Table 69 indicates that 57% of the students participated in the French conversation on the pre-test, and 80% participated during the post-test. Both pre- and post-test percentages were greater than that required by the objective. The evaluators recommend that the program staff review the appropriateness of the criterion level of this objective because it was accomplished at both testings. No significant difference existed between the pre-test and post-test scores. Objective K-4.1 was accomplished.

Objective K-4.1P:

The teacher will provide daily opportunity for discussion in French. The teacher will not discourage the children's use of their patois French. Activites will be recorded in their lesson plan book.

Evaluation:

Daily opportunities for discussion in French were provided with the following frequency:

December - 84%
January - 66%
February - 52%
March - 100%
April - 69%
May - 91%

The percentages represent the percentage of weeks in all the classrooms in which opportunity for discussion in French was provided. Because of the nature of the program, the lack of such a discussion 100% of the time suggests a possible reason for the failure of the program to accomplish objective K-4.1. Because this program is a bilingual program, the evaluators recommend that the teachers be encouraged to provide daily opportunity for discussion in French. This should be a procedure which is more strictly structured and enforced by the project administration. The fact that no French specialist exists in the program at this time may be an explanation for the lack of encouragement and structuring of daily discussion in French. The evaluators recommend that a consideration be made of including such a program in next year's project.

Objective K-4.2:

Students will demonstrate standard expression and pronounciation. At the end of the year the teacher will ask questions with standard response patterns as measured by teacher ratings and observer checklists.

Evaluation:

This objective was assessed by the teacher's presenting a brief conversation in French to a small group of French speaking students. The last sentence of this conversation asked the students a question. They were then encouraged to respond to the question; their ability to respond with standard French expressions and pronounciation was noted. The pre-test and post-test ratings, yes or no, were compared with a sign test for correlated data which is summarized in Table 70.

Table 70 indicates that 47% of the students contributed orally in standard French during the pre-test conversation, and only a slightly larger percentage, 52%, contributed in standard French to the post-test conversation. These results suggest that the instructional activities organized in the classroom which were directed toward this objective were not appropriate for the accomplishment of this product objective. A review of the corresponding process objective may indicate if either of these two conditions exist. Objective K-4.2 was not accomplished.

Table 70

Instructional Objective K-4.2
Summary of Sign Test for Correlated
Data and Percent at Criterion Level

Number with Pre and Post Scores	17
Number Showing Positive Change	2
Number Showing Negative Change	1
z	0.0000
p	not significant
% at Criterion-Pre	47
% at Criterion-Post	52

Objective K-4.2P:

> The audio-lingual method of presentation will be used. At the beginning of the year the teacher will administer orally to a sampling of the class questions wich elicit non-standard response patterns. Drill will be provided to the class as a group using full choral, half choral and individual response patterns. Children needing additional drill will utilize the language master, using response cards prepared by the project director. The activities will be recorded in the lesson plan book.

Evaluation:

The audio-lingual method of presentation was used in the classrooms. At the beginning of the year the teachers administered questions which elicited a non-standard response pattern. They also used drills involving full choral, half choral and individual response pattern. Children who required additional drills utilized the *Parlons Francais Kit* or teacher-made language master cards. Confirmation of the existence of this process activity was based on on-site observation of classes and interviews with classroom teachers. Teachers performed these activities at least once a week for the following percentage of weeks:

December - No record of process exists.
January - No record of process exists.
February - 68%
March - 50%
April - 84%
May - 65%

It should be noted that process objective K-4.2P does not specify how frequently such drills should occur. However, it seems obvious from the failure of students to accomplish objective K-4.2, the lack of significant difference between pre- and post-scores, and from the low frequency of performance of objective K-4.2P, that additional structuring of objective K-4.2P should occur. The evaluators recommend that the project focus on determining appropriate processes and frequencies of these processes for accomplishing objective K-4.2.

Objective K-4.3:

> Students will show a statistically significant (p .05) improvement in French vocabulary recognition as measured by a French vocabulary test (either standardized or teacher-made).

Evaluation:

Students were tested on this objective by being shown a series of 21 cards; each pictured a representation of a French vocabulary word; the child was asked to name the object in French. The highest possible score a student could receive was 21 correct.

Table 71

Instructional Objective K-4.3
N, X, SD, % at Criterion and t-ratio

N= 15		
	Pre	Post
X	7.4000	9.2000
SD	4.8138	4.6647
% at Criterion	0	0
Difference Between Means	1.8000	
df	14	
t	2.8731*	

* <.05

Table 71 indicates the results of the t-test for correlated data. The post-test scores were significantly different from the pre-test scores at the .05 level with the mean post-test score higher than the mean pre-test score. Therefore, objective K-4.3 was accomplished.

Objective K-4.3P:

> Vocabulary will be introduced within the framework of classroom activity. The classroom teacher will prepare for each new vocabulary word a visual

representation card. Peer teaching will be used for drill followed by utilization of the language master for students needing additional drill. The activities will be recorded in the lesson plan book.

Evaluation:

Vocabulary was introduced within the framework of classroom activites. Teachers prepared and used visual representation cards for new vocabulary words. They also used language master cards from the Parlons Francais Kit and the Talking Dictionary Kit for those students who required additional drill. Although process objective K-4.3P does not specify the frequency with which such drills should be performed, the following percentages indicate that amount of time in which the activities were performed at least once a week:

December - No record of process exists
January - No record of process exists
February - 84%
March - 65%
April - 92%
May - 71%

Since product objective K-4.3 was accomplished it seems reasonable to conclude that these percentages are appropriate frequencies for teaching of the process objectives. The evaluators recommend that a review of the frequency and processes used for the teaching of objective K-4.3 be made, and that a more specific statement of the specific frequency required be included in the process objective.

Objective K-4.4:

Students will demonstrate their ability to read basic French words with a standard accent. The teacher will provide a picture of ten basic French words. 85% of the class will be able to produce with standard accent the sound for eight of the words. This will be measured by teacher ratings and observer checklists.

Evaluation:

The teacher presented each child with a series of ten pictures correctly in French with a standard accent.

Table 72

Instructional Objective K-4.4
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 18

	Pre	Post
$\overline{X}$	5.4444	7.6111
SD	1.6063	2.0853
% at Criterion	0	0

Difference Between Means	2.1667
df	17
t	3.5730*

* <.01

The results of the t-test for correlated data used to analyze the scores satisfied the criterion on the pre-test, and no student satisfied the criterion on the post-test. It should be noted, however, that a significant difference existed between the pre-test and post-test results. These finding suggest that the project staff should review the appropriateness of the criterion established in the objective, that of 85% of the class being required to pronounce eight of ten sounds with a standard accent. After a consideration of the appropriateness of the criterion a revision of the objective seems reasonable. The fact that a significant difference exists between the pre and post test scores, however, suggests that the program is making some impact on the students' French pronounciation skills. Objective K-4.4 was not accomplished.

Objective K-4.4P:

> The teacher will introduce the students to the phonetic sounds of the consonants and basic vowel sounds (Dolch List). Words will be constructed from these sounds by the classroom teacher and placed on flash cards. Peer teaching will be used for drill. Activities will be recorded in the lesson plan book.

Evaluation:

The majority of teachers did not perform this process because they did not think the students were ready to read French words during the program. The following percentages, however, indicate the frequency with which teachers performed the activity at least once a week; no classroom began to perform this activity until March: March - 25%, April - 23%, May - 7%. The lack of emphasis on this process objective indicates quite clearly the reason why objective K-4.4 and K-4.4P was not accompliahed. The evaluators recommend that the project revew both the product and process objectives K-4.4 and K-4.4P to determine whether they are appropriate for the program. If they are not appropriate they should be eliminated from instructional procedures.

Objective K-5.1:

> 50% of the monolingual English students will show comprehension of simple classroom commands and procedures presented orally in French by the teacher by their ability to perform those commands. This will be measured by teacher rating and observer checklist.

Evaluation:

The English students selected for measurement of this objective were tested by the following procedures: the aide or teacher gave them a series of four commands in French to which they responded by performing the appropriate action; therefore, the highest possible score on this test was four. Students were only post-tested. The mean post-test score was 2.25. 25% of the students scored four correct as required by the objective. Objective K-5.1 was not accomplished; reasons for this failure should be investigated by the project staff and appropriate changes implemented.

Objective K-5.1P:

An audio-lingual approach will be used, coupled with the use of pattern drills programmed on cassettes and the language master. Activities will be carreid out daily and recorded in the lesson plan book.

Evaluation:

Classroom observation of kindergarten classes indicated that the teachers were using an audio-lingual approach to teaching French. They were also using pattern drills which were programmed on cassettes and on language masters. The process specified that teachers would provide appropriate activities daily. Daily activites were provided for the following percentage of time:

December - 50%
January - 30%
February - 76%
March - 75%
April - 84%
May - 71%

A review of these frequencies indicates that the percentages did not approach the 100% required by the objective. Because the product objective which corresponds to this process objective was not accomplished, this suggests that the process should have been performed more frequently. The evaluators recommend that a greater structuring of this process occur and that closer monitoring of its performance be made during the next project year.

Objective K-5.2:

> 75% of the English speaking students will be able to sing at least three French songs and play three French games. This will be measured by teacher rating and observer checklist.

Evaluation:

This objective was measured by instructing the group of children to sing three songs and play three games learned during the year. The teacher then observed if each child in the group was singing and/or playing the game. Those students who did so without hesitation received credit for their performance on the checklist. The highest possible score a student could receive on this measure was six. All three students tested received a score of six; therefore, 100% of the students accomplished the objectives stated for K-5.2. No pre-test measure of this objective had been made. Objective K-5.2 was accomplished.

Objective K-5.2P:

> Songs and games to be used will be collected by teachers during the summer. They will practice this activity at least once a week and record it in their lesson plan book.

Evaluation:

Because of the late start of the program songs and games were not collected during the summer but during the fall potato harvest vacation. Teachers practiced the process of using songs and games in the classroom at least once a week for the following percentage of time:

December - 83%
January - 92%
February - 100%
March - 90%
April - 92%
May - 78%

This high frequency of occurrence of the process activity probably explains the reason for the accomplishment of product objective K-5.2. The evaluators recommend that this process be continued during the next program year.

Objective K-5.3:

> 75% of the English speaking children will be able to identify orally 75% of the words on the French vocabulary lists developed by teachers. Their abilities will be measured by observer checklists and teacher ratings.

Evaluation:

Objective K-5.3 was measured by the teachers' showing the children a series of pictures and pointing to the object that a French word depicts. The child was asked to name this word. If he pronounced the word correctly in French he received credit for the question. The students were asked ten such questions each. The mean score on this test was six correct. No student satisfied the criteria of answering eight of ten questions correctly. The evaluators recommend that a review of the vacabulary words used for this activity be made. Then a review of the process used to teach these vocabulary words should also be performed to determine whether congruence exists between the words tested and the words taught. Objective K-5.3 was not accomplished.

Objective K-5.3P:

> Vocabulary will be introduced within the framework of classroom activities. The classroom teacher will prepare for each new vocabulary word a visual representation card. Peer teaching will be used for drill followed by utilization of the language master for students needing additional drill. The activities will be recorded in the lesson plan book.

Evaluation:

The teachers introduced vocabulary within the framework of classroom activities. Visual representation cards for new vocabulary words were prepared and language master cards from the Parlons Francais Kit were used for students needing additional drill. This activity was performed at least three times a week for the following percentage of time:

December - No record of process exists
January - No record of process exists
February - 46%
March - 40%
April - 61%
May - 60%

A review of these percentages suggest that no emphasis was placed on this activity directed toward product K-5.3 until February of the school year. This late implementation of this process may suggest that the criterion level established in the objective is too high for the students to obtain during the span of time spent on the activity, or that processes should be directed toward its accomplishment earlier in the year. The evaluators recommend that the project staff review both the process and product for objective K-5.3 and K-5.3P to determine their appropriateness. If the objectives are determined to be appropriate the teachers should consider an earlier introduction of material specified in that objective.

Objective K-6.1:

> 75% of the English speaking students will be able to sing at least three French songs and play three French games. This will be measured by teacher rating and observer checklists.

Evaluation:

This objective was measured by the same test as that used to assess objective K-5.2 (refer to evaluation of K-5.2). The two students tested on objective K-6.1 both received a perfect score of six required by the objective. Therefore, objective K-6.1 was accomplished.

Objective K-6.1P:

> Songs and games to be used will be collected by teachers during the summer. They will practice this activity at least once a week and record it in their lesson plan book.

Evaluation:

Because of the late start of the program songs and games were not collected during the summer but during the fall potato harvest vacation. Teachers practiced the process of using songs and games in the classroom at least once a week for the following percentage of time:

December - 83%
January - 84%
February - 84%
March - 80%
April - 92%
May - 78%

This high frequency of occurrence of the process activity probably explains the reason for the accomplishment of product objective K-5.2. The evaluators recommend that this process be continued during the next program year.

Objective K-6.2:

> 50% of the children will be able to tell orally a story about a historical event or person related to the Valley's history. This will be recorded and checked by teacher and evaluator on a checklist.

Evaluation:

The teacher presented each child individually with a booklet entitled "Les Acadiens" and asked the child to tell the teacher a story by reading the pictures. If the child could read ten of eighteen pictures correctly he would have satisfied the objective of telling about a historical event. Sixty-seven percent of the students received a satisfactory score of ten on this test. The mean score on the post-test for the six students tested was 10.13. No pre-test was administered. Objective K-6.2 was accomplished.

Objective K-6.2P:

> Appropriate stories about people and events in Valley history will be collected by teachers and used in the classroom on dates that are on or near significant dates for the even or person.

Evaluation:

Process K-6.2P was performed by the teachers. The booklet called "Les Acadians" was published by the project. It included appropriate stories about people and events in Valley history. Teachers performed process activities considered under objective K-6.2P at least once a week for the following percentage of time: March - 5%, April - 15%, May - 17%; it should be noted that the process was first performed in March. Since objective K-6.2 was accomplished, this seems to be a satisfactory frequency for the process even though it was not as high as planned.

Objective K-6.3:

> 50% of the students will be able to identify from a picture at least three landmarks of the Valley area. This will be measured by teacher rating and observer checklist.

Evaluation:

The teacher showed the child three pictures, each a historical landmark, and asked him to identify them. The total possible score on this test was three correct; students were required to receive a score of three to satisfy the objective. Table 73 summarizes the result of a t-test for correlated data used to compare the pre-test and post-test scores.

Table 73

Instructional Objective K-6.3
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 17	Pre	Post
$\overline{X}$	0.0588	0.1764
SD	0.2351	0.3811
% at Criterion	0	0

Difference Between Means	0.1176
df	16
t	1.4700*

* Not Significant

Table 73 reports that no student accomplished objective K-6.3 on either the pre-test or post-test. In addition, no significant difference existed between the pre-test and post-test scores. The evaluators recommend that a review be made of the appropriateness of objective K-6.3 for inclusion in the bilingual program. A decision should be made as to whether kindergarten instruction will focus on this aspect of cultural teaching. Objective K-6.3 was not accomplished.

Objective K-6.3P:

> Teachers will collect pictures of Valley landmarks (e.g. buildings or significant natural resources) and describe them to the children and their importance. The activities will be recorded in the lesson plan book.

Evaluation:

This process was not performed by the teachers. This explains why the corresponding product objective was not accomplished. The evaluators recommend that the project review both product and process to determine if they are appropriate for inclusion in the kindergarten instructional program.

INSTRUCTIONAL COMPONENT: GRADE ONE OBJECTIVES

Objective 1-1.1:

> 100% of the students will demonstrate the readiness skills specified for K. Refer to instructional K component for specific performance objectives and evaluations.

Evaluation:

The fact that the grade one students were promoted from kindergarten to first grade suggests that they have demonstrated the readiness skills specified for kindergarten. In this sense Objective 1-1.1 has been accomplished.

Objective 1-1.P:

> The teacher will continue development of all readiness skills. Teachers will evaluate children at the beginning of the year to determine their mastery of the readiness skills. Instruction will be provided on an individualized small group basis. Children will be identified and activities provided for them recorded in the lesson plan book.

Evaluation:

No evaluation of the process objective occurred. It was assumed that since the children were learning first grade curriculum they already possessed the readiness skills needed for this instruction. Any readiness skills still required were provided by the first grade teacher.

Objective 1-1.2:

> At the conclusion of the year 40% of the students will correctly say in English the 115 words common to pre-primers when presented a visual stimulation. Their abilities will be measured by teacher ratings and observer checklists.

Evaluation:

This objective was measured by showing each individual a series of pictures. The students were asked to identify the picture using a single word to name it. The student's reply had to match that word written on the back of the picture to receive credit. The highest possible score on this exercise was twelve correct. A t-test for correlated data was used to compare the pre-test and post-test scores; this analysis is summarized in Table 74.

The results in Table 74 state that 12% of the students had attained the criterion level on the pre-test, and 15% of the students had attained it on the post-test. This percentage was not sufficient for the accomplishment of objective 1-1.2. It should be noted, however, that a statistically significant difference existed between the pre-test and post-test scores. These results suggest that the established criterion level may not be appropriate for these students. The evaluators recommend that the project staff review the appropriateness of this objective and reconsider the criterion level of 40%

established in the objective. Objective 1-1.2 was not accomplished.

Table 74

Instructional Objective 1-1.2
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 23	Pre	Post
$\overline{X}$	9.3478	10.3043
SD	1.5211	1.1587
% at Criterion	12	15
Difference Between Means		0.9565
df		22
t		3.5412*

* <.01

Objective 1-1.2P:

> Teachers will diagnose the learning styles of children and will use a phonetic or whole word approach for different children. Activities will be provided at least once a week and will be recorded in the lesson plan book.

Evaluation:

Interviews with teachers and classroom observation of grade one classes indicated the teacher diagnosed the learning styles of children. They then used the phonetic or whole word approach for different children depending on their particular needs. Activities which the teachers used were monitored by the evaluator and curriculum coordinator. Activities directed toward the performance of project objective 1-1.2 was provided at least once a week for the following percentage of time:

December - 62%
January - 76%
February - 100%
March - 95%
April - 90%
May - 79%

In spite of the fact that process objective 1-1.2P was performed with high frequency, the corresponding product objective was not accomplished. This observation suggests that the activities specified in this process may not have been appropriate for instruction or once a week was not sufficient frequency for performance of the activities. The evaluators recommend that the project staff review the appropriateness of process activities 1-1.2P and determine if they are occurring with satisfactory frequency; appropriate changes should then be implemented.

Objective 1-1.3:

> At the conclusion of the year 40% of the students will, when presented a word with the following initial consonants followed by a known ending, correctly state the word: b,d, f,h,j,k,l,m,n,p,q,r,s,t,v,w,x,y,z. Their skills will be measured by teacher ratings and observer checklists.

Evaluation:

The results of the t-test for correlated data shown in Table 75 describe the students' performance of objective 1-1.3. The students were presented with a word card and instructed to read the word on the card. The tester recorded the student's progress on the checklist for this objective, which was composed only of the initial letter of each word. If the student read the word correctly he was given credit for appropriately identifying its initial letter. The highest possible score a student could receive was eighteen correct.

Table 75

Instructional Objective 1-1.3
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 19	Pre	Post
$\overline{X}$	2.5263	12.6315
SD	3.2014	6.3925
% at Criterion	0	27

Difference Between Means	10.1052
df	18
t	7.8566*

* <.001

The results in Table 75 indicate that no student performed at the criterion level on the pre-test, and 27% of the students performed at the criterion level on the post-test. Twenty-seven percent, however, was not the 40% required by the objective. It seems quite possible that since a significant difference occurred between the pre-test and post-test scores at the .001 level that the performance level of 100% correct established for these students may have been too high. The evaluators recommend that the project review the appropriateness of the criterion level specified in objective 1-1.3. Objective 1-1.3 was not accomplished.

Objective 1-1.3P:

> Teachers will use a phonetic approach to teaching these word skills. They will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

Classroom observation and discussion with grade one teachers indicated that they used the phonetic approach to teach these words skills. Teachers provided appropriate exercises to perform activities directed toward objective 1-1.3 at least once a week for the following percentage of the time:

December - 93%
January - 100%
February - 100%
March - 95%
April - 100%
May - 79%

The fact that the teachers were performing what they considered to be appropriate activities once a week, suggests that either once a week was too infrequent for these activities, or that the actual activities were not appropriate for achieving objective 1-1.3. The evaluators recommend that the project staff review the appropriateness of the processes used for the attainment of objective 1-1.3, and also consider increasing the frequency with which they are performed.

Objective 1-1.4:

> At the conclusion of the year 40% of the students will correctly name words in which the following consonants occur in the final position: c,d,f,h,j,k,l,m,n,p,q,r,s,t,v,w,x,y.z. Their skills will be measured by teacher rating and observer checklists.

Evaluation:

This objective was tested by showing the child a series of seventeen cards, each with three pictures on it. The child was asked to name the picture which ended with a particular sound. The highest possible score a student could receive was seventeen correct.

The results shown in Table 76 indicate that on the pre-test 28% of the students accomplished the objective, while no student accomplished it on the post-test. It should be noted, however, that a significant difference existed between the pre-test and post-test scores, as shown by the t-test for

Table 76

Instructional Objective 1-1.4
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 18

	Pre	Post
$\overline{X}$	11.0555	15.1111
SD	5.2225	3.6649
% at Criterion	28	0

Difference Between Means	4.0556
df	17
t	3.6445*

* <.01

correlated data summarized in Table 76. These results suggest that the students improved but that those students who had received perfect scores on the pre-test received lower scores on the post-test. The evaluators recommend that the project staff review the appropriateness of this objective. The fact that a significant gain occurred suggests that the bilingual program had some impact on the achievement of this objective, but not a sufficient impact to accomplish the objective. Objective 1-1.4 was not accomplished.

Objective 1-1.4P:

> Teachers will use a phonetic approach to teaching these word skills. They will provide

appropriate exercises and opportunities in the lesson plan book.

Evaluation:

Teachers provided a phonetic approach for teaching word skills. This was confirmed by discussion with the teachers and on-site visits. The teachers provided appropriate exercises for accomplishing objective 1-1.4 at least once a week for the following percentage of time:

December - 93%
January - 100%
February - 100%
March - 91%
April - 95%
May - 77%

These high frequencies suggest that if the process was appropriate as specified these student should have accomplished the objective 1-1.4; but because objective 1-1.4 was not accomplished, it seems reasonable to conclude that either the process activities which were directed toward this objective were not appropriate or the frequency of performing them once a week was not sufficient. The evaluators recommend that a review of process 1-1.4P be made, with consideration for its appropriateness and that of the frequency with which it is performed.

Objective 1-1.5:

At the conclusion of the year 40% of the students will correctly name words in which the consonant sounds occur in the middle of the word. Their abilities will be measured by teacher rating and observer checklist.

Evaluation:

This objective was assessed by presenting each child with a series of cards, each containing three pictures. The tester instructed the student to name the picture which had a particular sound in the middle. This exercise was repeated for eighteen questions; the students were required to answer all eighteen questions correctly to accomplish the objective. The t-test for correlated data used to compare the pre-test scores is summarized in Table 77.

Table 77

Instructional Objective 1-1.5
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 17

	Pre	Post
$\overline{X}$	9.7058	14.5882
SD	5.4640	3.8204
% at Criterion	17	0

Difference Between Means	4.8824
df	16
t	3.9778*

* <.01

The results shown in Table 77 state that 17% of the students could perform the specified activity on the pre-test, and no student could perform the specified activity on the post-test. Yet a statistically significant difference exists between the pre-test and post-test scores. This suggests that, although 17% of the students received perfect scores on the pre-test, the majority of students improved their scores from the pre- to the post-test. The results for this objective suggest that the program staff should review the appropriateness of the criterion level and performance level specified in the objective. The evaluators recommend a review of this objective before its inclusion in the next project's insturcitonal program. Objective 1-1.5 was not accomplished.

Objective 1-1.5P:

> Teachers will use a phonetic approach to teaching these word skills. They will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

Monitoring of classroom activities indicated that the teachers employed a phonetic approach in teaching word skills. They provided appropriate activities for acquiring skills stated in objective 1-1.5 at least once a week for the following percentage of time:

December - 56%
January - 94%
February - 81%
March - 86%
April - 95%
May - 70%

For the most part, these frequencies were quite high, although they did not approach 100%. Since the corresponding product objective was not accomplished, either 100% performance of the process at least once a week must occur, or a review of the appropriateness of the process as specified should be made. The exercises provided may not have been appropriate for accomplishing the objective, or once a week was not a sufficient frequency for presenting these exercises. The evaluators recommend a review of this objective before its inclusion in the 1971 program.

Objective 1-1.6:

> At the conclusion of the year 20% of the students will correctly pronounce words using the following initial consonant blends; sh,st,bl,tr, fr,wh,th,ch,sl,cl,gl,sp,sm,sn,sw,tw. Their abilities will be measured by teacher ratings and observer checklists.

Evaluation:

The results of the t-test for correlated data between the two sets of scores shown in Table 78 indicate that no student could perform the objective at the specified level on either the pre-test or post-test. In addition, no significant difference in their ability to correctly pronounce

Table 78

Instructional Objective 1-1.6
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 25

	Pre	Post
$\overline{X}$	14.8400	15.9200
SD	3.1071	0.2712
% at Criterion	0	0

Difference Between Means	1.0800
df	24
t	1.8009*

* Not Significant

words using initial consonant blends occurred between the two testings. Students were tested by being presented a series of pictures. They were required to name the picture; correct identification gave them credit for the initial blend of the word.

The evaluators recommend that a review of the appropriateness of this objective for accomplishment in grade one be made. The fact that no student could perform the objective at the specified level and that the students made no gain between pre- and post-testing questions its appropriateness for inclusion in the program. Objective 1-1.6 was not accomplished.

Objective 1-1.6P:

Teachers will use a phonetic approach to teaching word skills. They will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

The teachers used the phonetic approach to teaching word skills. This was confirmed by classroom observation of the evaluator and curriculum coordinator. Teachers provided appropriate activities for learning initial consonant blend sounds at least once a week for the following percentage of time:

December - 31%
January - 76%
February - 90%
March - 86%
April - 100%
May - 79%

Because of the generally high frequency of performing the activities specified at least once a week, lack of performance probably cannot be cited as the reason for the failure of the students to accomplish objective 1-1.6. The project staff should review the appropriateness of the exercises provided at least once a week. They should also consider whether performing this activity only once a week is sufficient. A review of objective 1-1.6 should occur before it is implemented for the next project year.

Objective 1-1.7:

> At the conclusion of the year, 20% of the students will correctly pronounce words involving the three ending sounds of "ed" as in wanted(ed), moved (d), and liked (t) and the endings "ing" and "s". Their skills will be measured by teacher ratings and observer checklists.

Evaluation:

Objective 1-1.7 was tested by presenting the student a word stimulus which he identified with or without the help of the teacher. After this word stimulus was presented and identified a word with a similar ending sound was presented and the student was requested to identify this word. This procedure was repeated for five questions. Students were required to answer all questions correctly to accomplish the objective.

Table 79

Instructional Objective 1-1.7
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 27

	Pre	Post
X	0.0000	2.1851
SD	0.0000	2.0191
% at Criterion	0	33

Difference Between Means	2.1851
df	26
t	1.0822*

* Not Significant

The results of the t-test for correlated data and percentage at criterion tabulation summarized in Table 79 indicate that no student could perform the objective on the pre-test, and 33% of the students could perform the objective on the post-test. This 33% of the class is greater than the 20% required by the objective. No significant difference existed between the pre-test and post-test scores. Objective 1-1.7 was accomplished.

Objective 1-1.7P:

> Teachers will use a phonetic approach to teaching these word skills. They will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

Observation of classes and discussion with teachers indicated that they used the phonetic approach to teaching the word skills specified in objective 1-1.7. They provided appropriate activites for their students to perform at least once a week for the following percentage of time:

December - 18%
January - 54%
February - 54%
March - 78%
April - 100%
May - 75%

The teachers provided this type of activity with increasing frequency as the program progressed. This seems to be an appropriate procedure for teaching the skills in objective 1-1.7 because the objective was accomplished by the time of post-testing.

Objective 1-1.8:

> At the conclusion of the year 40% of the students will correctly state the pronounciation of compound words (into, upon) given a visual stimulation. Their abilities will be measured by teacher rating and observer checklist.

Evaluation:

Students were requested to pronounce a series of five compound words which were represented on a series of picture cards. The students received one point for each correctly pronounced word. A total score of five correct was required for accomplishment of the objective. A t-test for correlated data was used to compare the pre-test and post-test score; this analysis is summarized in Table 80. Table 80 states that 50% of the students accomplished the objective on the pre-test and a slightly larger percentage, 55% accomplished it on the post-test.

Both pre- and post-test percentages were greater than the criterion specified in the objective. No significant difference existed between the pre-test and post-test scores. The students' performance on this measure suggests that the program had limited impact on their ability to pronounce compound

Table 80

Instructional Objective 1-1.8
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 18	Pre	Post
$\overline{X}$	4.2777	4.3888
SD	3.4083	4.0354
% at Criterion	50	55

Difference Between Means	0.1111
df	17
t	0.0210*

* Not Significant

words. A consideration of the appropriateness of the criterion and/or the objective should be made. Objective 1-1.8 was accomplished.

Objective 1-1.8P:

> Sight word drill will be conducted by the teacher at least once a week. These will be recorded in their lesson plan book.

Evaluation:

Sight word drills were conducted by the teachers in order to accomplish objective 1-1.8. They were performed at least once a week for the following percentage of time:

December - 50%
January - 54%
February - 100%
March - 82%
April - 100%
May - 71%

Because no significant difference existed between the pre-test and post-test scores, this frequency of process probably reinforced or maintained the skills the students already had when they entered the program. The need for such a reinforcing activity should be determined.

Objective 1-1.9:

> At the conclusion of the year 20% of the students will correctly pronounce words containing the following word families: all, at, it, et, en, in, an, ill, ell, ay, ake, or. Their skills will be measured by teacher ratings and observer checklists.

Evaluation:

Objective 1-1.9 was assessed by presenting the student with a series of sixty cards, each with a family of words printed on it. The student received credit for each word he pronounced correctly; the highest possible score was sixty correct. Students were required to receive sixty points in order to accomplish the objective. A t-test for correlated data was used to compare pre- and post-test results, as shown in Table 81.

Table 81 reports that 6% of the students had accomplished the objective on the pre-test, while no student could perform

Table 81

Instructional Objective 1-1.9
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 18

	Pre	Post
$\overline{X}$	13.3333	11.2777
SD	19.3964	2.7449
% at Criterion	6	0

Difference Between means	2.0556
df	17
t	0.4431*

* Not Significiant

the objective on the post-test. In addition, no significant difference existed between the pre-test and post-test scores. The evaluators highly recommend that a review of this objective be made. The appropriateness of this objective for the first graders seems highly questionable. The low mean score on both pre- and post-tests and the lack of significant difference between these two sets of scores suggest that participation in the program had no impact on the acquisition of this skill. Its importance for inclusion in the program should be evaluated. Objective 1-1.9 was not accomplished.

Objective 1-1.9P:

Sight word drill will be conducted by the teacher at least once a week. These will be recorded in their lesson plan book.

Evaluation:

The sight word drills were conducted by the teacher. Appropriate exercises were provided at least once a week for the students for the following percentage of time:

December - 81%
January - 82%
February - 100%
March - 82%
April - 100%
May - 79%

These percentages indicate that process 1-1.9P was being performed in the classroom at least once a week for a large majority of the time. Yet the corresponding product objective was not accomplished. This observation suggests that either once a week was too infrequent for the process to result in the achievement of the corresponding product objective, or the activities included in this process would not lead to the achievement of the corresponding product objective. A review of these possibilities and restructuring of the process objective seems in order.

Objective 1-1.10:

At the conclusion of the year 20% of the students will demonstrate 40% accuracy in the following comprehension skills:

Given a printed symbol can verbally describe a specific example, eg. shown the words "house" the child can describe his or some other house.
Can follow printed directions. eg. given a picture with three objects the child can draw a circle around the objects which the directions instruct him to circle.
Can verify a statement (See if Sandy ran away).
Can draw conclusions from facts (What do you think happened then).
Can recall what is being read aloud.
Can recall what has been read silently.
Can place events in sequence.
Can remember where to find answers to questions.

Their abilities will be measured by teacher rating and observer checklist and paper and pencil tests.

Evaluation:

Each student was tested on each of the skills specified in the objective. For example, the student was shown a reproduction of the word "house" and asked to describe a house. Similar tests were conducted for the other parts of this objective. The highest possible score a student could receive was twelve correct; a student was required to receive a score of five to accomplish the objective. Table 82 presents the summary of the t-test for correlated data used to compare the pre- and post-test scores.

The results shown in Table 82 indicate that 28% of the students received the required score of five on the pre-test, and 90% of the students received such a score on the post-test. Both percentages are sufficient for the accomplishment of the objective. A significant difference existed between the pre- and post-test scores, a difference which could have

Table 82

Instructional Objective 1-1.10
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 16

	Pre	Post
$\overline{X}$	4.1875	10.5625
SD	4.5307	1.4127
% at Criterion	28	90

Difference Between Means	6.3750
df	15
t	6.4051*

* <.001

occurred by change less than one time in 1,000. These results suggest that the criterion level established in the objective is not appropriate; it seems too low. The evaluators recommend that this criterion level be changed in line with the results obtained from the testing for this objective. Objective 1-1.10 was accomplished.

Objective 1-1.10P:

> Teachers will follow the techniques outlined in the teachers guide for the selected reading series. The activities will be recorded in the lesson plan book.

Evaluation:

Classroom activities indicated that the teachers followed the techniques outlines in the teachers guide for the selected reading series. They performed activities directed toward these comprehension skills at least once a week for the following percentage of time:

December - No record of process exists
January - 82%
February - 100%
March - 100%
April - 100%
May - 78%

These high percentages of occurrence of process activities probably explains the large percentage of students who accomplished the product objective. The significant gain which occurred between the pre- and post-testing for the corresponding product objective suggests that the activities included in process 1-1.10P are appropriate for obtaining the product objective.

Objective 1-1.11:

> At the end of the year 10% of the students will demonstrate the following oral and silent reading skills:
>
> Uses correct phrasing.
> Uses proper voice intonation.
> Understands and follows the signals imparted of simple punctuation: such as period, comma, question mark, exclamation.
> Reads silently without lip movement or whispering.
> Reads without head movement.
>
> Their abilities will be measured by teacher rating and observer checklist.

Evaluation:

This objective was measured by having the student read one story out loud and a second story to himself. Those aspects of the objective which applied to each kind of reading were checked while the student was reading. The highest score a student could receive was six; the students were required to obtain such a score for the accomplishment of the objective. A t-test for correlated data was used to compare the pre-test and post-test scores; Table 83 presents this analysis.

Table 83

Instructional Objective 1-1.11
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 26

	Pre	Post
$\overline{X}$	0.0000	2.0000
SD	0.0000	2.0939
% at Criterion	0	0

Difference Between Means	2.0000
df	25
t	0.9551*

* Not Significant

Table 83 indicates that no student could perform the objective on the pre-test; 7% of the students could perform it on the post-test. This percentage was too low for the program to accomplish the objective. No significant difference existed between the students' performance on the pre-test and post-test. A review of the process may explain why the program seems to have had no impact on the accomplishment of the objective 1-1.11. The evaluators recommend that this objective be reviewed for its appropritaeness for inclusion in the program. In addition, a review of the corresponding process should be made to determine if incorrect process explains the failure to accomplish the objective. Objective 1-1.11 was not accomplished.

Objective 1-1.11P:

> The classroom teacher will evaluate each child individually at the beginning of the year, and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

First grade teachers evaluated each child individually at the beginning of the year and grouped them for instruction in oral and silent reading. Teachers provided appropriate exercises directed toward objective 1-1.11 at least once a week for the following percentages of time:

December - 87%
January - 82%
February - 81%
March - 95%
April - 100%
May - 78%

This high percentage of the performance of the specific process stated for this objective fails to explain the failure to accomplish the corresponding product objective. The evaluators suggest that once a week, as required by the objective, may be too infrequent a performance of appropriate activities. In addition, a review of the actual processes used for teaching the skills cited in objective 1-1.11 should be made.

Objective 1-2.1:

> At the conclusion of the year 50% of the students will be 80% accurate in being able to differentiate between equivalent and non-equivalent sets as measured by teacher-made paper and pencil tests.

Evaluation:

Students were required to complete a paper and pencil test of four questions. On two questions they identified the non equivalnet sets. A score of four was required for the accomplishment of the objective. Students' performances on the pre- and post-tests were compared with a t-test for correlated data, which is summarized in Table 84. Table 84 indicates that 17% of the students could perform the objective on the pre-test, and 51% could perform it on the post-test.

Table 84

Instructional Objective 1-2.1
N, $\overline{X}$, SD, % at Criterion and t-ratio

N=22

	Pre	Post
$\overline{X}$	0.0000	2.0000
SD	0.0000	2.0939
% at Criterion	0	0

Difference Between Means	1.5455
df	21
t	4.0489*

* <.001

In addition, a significant difference existed between the pre- and post-test scores; so great a difference could have occurred by chance less than one time in 1,000. These results suggest that the program had some impact on the students' knowledge of equivalent and non-equivalent sets. Objective 1-2.1 seems to be appropriate for the program as it is stated. Objective 1-2.1 was accomplished.

Objective 1-2.1P:

> The classroom teacher will evaluate each child individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

Students were evaluated individually at the beginning of the year and grouped for instruction. Appropriate exercises for learning the concepts of equivalent and non-equivalent sets were provided at least once a week for the following percentage of time:

December - 56%
January - 76%
February - 90%
March - 60%
April - 65%
May - 47%

The fact that the objective 1-2.1 was accomplished suggests that this process was appropriate.

Objective 1-2.2:

> At the conclusion of the year 50% of the students will be 80% accurate in associating number symbol with a set of objects on a paper and pencil test.

Evaluation:

Students were required to complete a paper and pencil test on which they wrote for each number set pictured the number of objects in that set. The highest possible score a student could receive was eleven. Students were required to receive a score of nine to accomplish the objective. The analysis of the scores is presented in Table 85.

Table 85

Instructional Objective 1-2.2
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 18

	Pre	Post
$\overline{X}$	10.3333	10.7777
SD	1.9149	0.9166
% at Criterion	89	95

Difference Between Means	0.4444
df	17
t	1.4098*

* Not Significant

A t-test for correlated data compared the pre-test and post-test scores. Eighty-nine percent of the students could perform the objective on the pre-test. Ninety-five percent of the students could perform the objective on the post-test. Both percentages are significantly higher than the 50% required by the objective. No significant difference existed between the pre-test and post-test scores. These results suggest that objective 1-2.2 was not appropriate for inclusion in the first grade curriculum. It seems evident from Table 85 that the majority of students possessed the skill stated in this objective before they entered grade one. This skill should be considered a readiness skill and as such it should probably be included in the kindergarten objective. The program seems to have had limited impact on the accomplishment of this objective. Objective 1-2.2 was accomplished.

Objective 1-2.2P:

> The classroom teacher will evaluate each child individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

At the beginning of the year teachers evaluated each child's skill in naming sets and grouped the children for instruction according to their abilities. Appropriate exercises were provided by the teachers for acquisition of skills in these areas at least once a week for the following percentage of time:

December - 75%
January - 70%
February - 90%
March - 86%
April - 80%
May - 60%

These processes seemed to have reinforced the skills that the students already possessed when they entered grade one. Their importance for gaining new skills does not seem to be significant for this program. The evaluators recommend that perhaps the process should focus on identification of sets with a large number of objects in it. A review of the necessity of process and product objective 1-2.2P should be made.

Objective 1-2.3:

> At the conclusion of the year 50% of the students will be 80% accurate in orally counting from 0 to 100. Their ability will be measured by teacher rating and observe checklist.

Evaluation:

Each pupil was individually asked by the teacher to count from 0 to 100. A record was made of the highest number to which the student could count. The student was required to receive a score of 80 or more to accomplish the objective. A t-test for correlated data, as presented in Table 86, was used to compare the two sets of scores.

Table 86

Instructional Objective 1-2.3
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 24

	Pre	Post
$\overline{X}$	28.5000	76.9583
SD	23.2558	33.1254
% at Criterion	8	65

Difference Between Means	48.4583
df	23
t	7.0329*

* <.001

The results shown in Table 86 indicate that a significant difference existed between the pre- and post-test measure of the students' ability to count from 0 to 100. Eight percent of the students performed at criterion level on the pre-test, while 65% of the class performed at the criterion level on the post-test. This latter percentage was satisfactory for objective 1-2.3 to be accomplished by the program. These results suggest that the program had a positive impact on the students' ability to count orally from 0 to 100. Objective 1-2.3 was accomplished. It seems to be an appropriate objective for the bilingual program grade one classes.

Objective 1-2.3P:

> The teacher will practice counting activities at least once a week and record the activities in the lesson plan book.

Evaluation:

The following percent of available time was devoted to counting activities at least once a week:

December - 56%
January - 88%
February - 81%
March - 73%
April - 95%
May - 44%

The fact that product objective 1-2.3 was accomplished suggests that this frequency of performing the activities specified in process 1-2.3P was appropriate. The particular activities used also seemed to be appropriate.

Objective 1-2.4:

> At the conclusion of the year 50% of the students will be 50% accurate in writing and recognizing the numbers 0 to 100. This will be measured by their written product and paper and pencil tests.

Evaluation:

Students were presented with a written test on which they were asked to write the numbers missing from the set of 0 to 100 printed on the sheet. The highest possible score a student could receive was 100. In order to accomplish objective 1-2.4 the students were required to receive a score of fifty. A t-test for correlated data was performed to compare the pre-test and post-test scores; this analysis is summarized in Table 87.

Table 87

Instructional Objective 1-2.4
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 19	Pre	Post
$\overline{X}$	58.1052	94.9473
SD	39.0935	15.9688
% at Criterion	53	89

Difference Between Means	36.8421
df	18
t	4.2194*

* <.001

The results shown in Table 87 state that 53% of the students could perform the objective on the pre-test, and 89% of the students could perform it on the post-test. Both percentages are above the 50% required by the objective. The fact that a significant difference existed between the pre-test and post-test scores, however, suggests that criterion percentage of 50% of the students was most likely inappropriate, that is, too low. The evaluators recommend that the criterion percentage be raised in line with the results shown in Table 87. Objective 1-2.4 was accomplished.

Objective 1-2.4P:

> Teachers will draw the numbers on the blackboard and then on paper. They will also work with each child individually to trace the numbers. They will perform this activity at least once a week and record it in their lesson plan book.

Evaluation:

The teachers performed the activities stated in the process objective. They had students trace numbers and work with numbers at least once a week for the following percentage of time:

December - 75%
January - 82%
February - 90%
March - 73%
April - 90%
May - 60%

The fact that a significant difference existed between the pre-test and post-test scores suggests that the process used for accomplishing objective 1-2.4 was appropriate.

Objective 1-2.5:

> At the conclusion of the year 50% of the students will be able by visual representation to demonstrate an understanding of the concepts 1/2 and 1/4. This will be measured by the students' ability to color in 1/2 and 1/4 of a circle on paper.

Evaluation:

The students were presented with a pair of circles, one of which was divided in half, and with a pair of squares, one of which was divided in half. The student was asked to identify each object in the pair which was divided in half. Then the student was asked to color 1/4 or 1/2 of six sets of objects. The total number of correct responses was eight correct. The students were required to answer all questions correctly to accomplish the objective.

The results shown in Table 88 report that 21% of the students received a score of eight on the pre-test; 96% of the students received a score of eight on the post-test. In addition, a significant difference existed between the pre-test and post-test scores at the .001 level as shown in Table 88's representation of the t-test for correlated data done on these two sets of scores. These results suggest that participation in the program had a significant impact on the students ability to understand the concepts of 1/2 and 1/4. Objective 1-2.5 was accomplished. The evaluators note the appropriateness of this

Table 88

Instructional Objective 1-2.5
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 23

	Pre	Post
$\overline{X}$	4.8695	7.7391
SD	2.6914	1.2236
% at Criterion	21	96

Difference Between Means	2.8696
df	22
t	4.8301*

* <.001

objective and recommend that it be included in the program for the next project year.

Objective 1-2.5P:

> Teachers will prepare and use worksheets at least once a week. They will ask children to color in 1/2 or 1/4 of objects. They will record these activities in their lesson plan books.

Evaluation:

Interviews with project teachers and observation of first grade classes indicated that the teachers felt that the objective was not appropriate for instruction at the beginning of the year, but was appropriate for the end of the year. The fact the 96% of the students could perform the objective by the end of the year confirms their reports. Teachers provided worksheets at least once a week at the end of the year for the following percentage of weeks:

December - 0%
January - 11%
February - 27%
March - 43%
April - 75%
May - 30%

The general trend of the frequency of this activity to increase supports the teachers' comments about performance of the instructional process. The fact that product objective 1-2.5 was accomplished suggests that appropriateness of the corresponding process objective.

Objective 1-2.6:

> At the conclusion of the year 20% of the classes will be 80% accurate in orally reading the ordinal numbers 1 to 20. (first, second, twentieth). Their skills will be measured by teacher rating and observer checklist.

Evaluation:

The students were shown a series of pictures and asked to identify the ordinal position of a particular picture on the card. The highest possible score a student could receive on this test was ten. In order to accomplish objective 1-2.6 the students were required to answer eight questions correctly. The t-test for correlated data used to compare the pre-test and post-test scores is summarized in Table 89.

Table 89

Instructional Objective 1-2.6
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 17

	Pre	Post
$\overline{X}$	4.2352	8.7647
SD	3.3171	1.2616
% at Criterion	21	31

Difference Between Means	4.5295
df	16
t	5.2267*

* <.001

The data shown in Table 89 report that 21% of the students could perform the objective on the pre-test, and 31% of the students could perform it on the post-test. Both percentages were appropriate for the accomplishment of the objective. Yet the fact that a significant difference existed between the pre-test and post-test scores, a difference which could have occurred by chance less than one time in 1,000 suggests that the program had a positive impact upon the students' achievement in the area of knowledge of ordinal numbers. The evaluators recommend, based on the data presented in Table 89, that the program consider raising the criterion level required for the accomplishment of this objective so that it will not be satisfied at the time of the pre-testing. Objective 1-2.6 was accomplished.

Objective 1-2.6P:

> The classroom teacher will evaluate each child individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

The classroom teachers evaluated each child individually either formally or informally at the beginning of the year. Children were then grouped for instruction. Appropriate activities directed toward the learning of the ordinal numbers one to twenty were performed at least once a week for the following percentage of time:

December	- 31%
January	- 58%
February	- 54%
March	- 34%
April	- 55%
May	- 25%

These small percentages suggest that perhaps a larger number of students could have performed the objective if processes directed toward accomplishing objective 1-2.6 were performed more frequently. The evaluators recommend that the program review the appropriateness of this process objective and determine whether the project should structure and enforce its occurrence at least once a week in the classroom.

Objective 1-2.7:

> At the conclusion of the year 40% of the class will be 80% accurate in their ability to use a number line to show number sequence. Their ability will be measured by teacher rating and observer checklist.

Evaluation:

The teacher displayed a number line for the student. Each child was then asked to read three sequences of numbers from the line. If the sequence of numbers was read correctly the student was given credit for his response. Students were required to answer the three questions correctly to accomplish objective 1-2.7. Table 90 summarizes the analysis of participants' scores; a t-test for correlated data was employed.

The results summarized in Table 90 note that no student could perform objective 1-2.7 on the pre-test. In contrast, 96% of the students could perform the objective on the post-test. As might be expected from these percentages, a significant difference at the .001 level existed between the pre-test and post-test scores. These results suggest that the bilingual program had a positive impact on the students' ability to use the number line to show number sequence. The evaluators recommend that this objective be included in the program for the next project year. The evaluators also suggest, however, that the program staff should review the appropriateness of the criterion level of 40% specified in the

Table 90

Instructional Objective 1-2.7
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 27

	Pre	Post
$\overline{X}$	0.0000	2.8888
SD	0.0000	0.5667
% at Criterion	0	96

Difference Between Means	2.8888
df	26
t	5.0975*

* <.001

objective. They might consider raising this criterion level in line with the performance of the students indicated in Table 90. Objective 1-2.7 was accomplished.

Objective 1-2.7P:

> The teacher will ask students to name the numbers before, after, and between designated portions of the number line. These activities will be conducted at least once a week and recorded in the lesson plan book.

Evaluation:

Teachers conducted the activities specified in process objective 1-2.7P at least once a week for the following percentage of time:

December - 93%
January - 82%
February - 90%
March - 82%
April - 95%
May - 67%

The high frequency of process activity 1-2.7 explains the accomplishment of the objective. This process seems to be appropriate for its corresponding product and should be implemented for the next project year.

Objective 1-2.8:

> At the conclusion of the year 40% of the students will be 80% accurate in combining sets of objects up to twelve. This will be measured by teacher rating and observer checklist.

Evaluation:

Table 91 presents the analysis of the scores on this measure; a t-test for correlated data was performed. The results summarized in Table 91 indicate that 15% of the students could perform the objective on the pre-test, and 70% of the students could perform it on the post-test. This 70% is greater than the 40% required in the objective. In addition, a significant difference existed between the pre-test and post-test scores, as shown in Table 91. A difference so large could have occurred by change less than one time in 100. Students were measured in objective 1-2.8 by being required to solve five of six problems correctly. Objective 1-2.8 seems to be appropriate for the bilingual program. The impact of participation in this program on the accomplishment of this objective is evidenced

Table 91

Instructional Objective 1-2.8
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 27

	Pre	Post
$\overline{X}$	3.8518	5.3703
SD	2.4601	1.1910
% at Criterion	15	70

Difference Between Means	1.5185
df	26
t	2.9768*

* <.01

in Table 91. Objective 1-2.8 was accomplished. The evaluators recommend that this objective be included in the program for the next project year.

Objective 1-2.8P:

> The teacher will encourage free play in which students create two sets of objects with no more than six objects per set, and combine the sets, discovering the number of objects in the joined set. These activities will be recorded in the lesson plan book.

Evaluation:

Observation of classes and discussion with first grade teachers indicated that they encouraged free play in which students worked with sets of no more than six objects. The students' play involved combining the sets and discovering the number of objects in the two joined sets. Teachers structured activities directed at accomplishing objective 1-2.8 at least once a week for the following percentage of time:

December - 31%
January - 82%
February - 100%
March - 91%
April - 90%
May - 71%

This high percentage of time seems congruent with the accomplishment of objective 1-2.8. The appropriateness of process 1-2.8P for accomplishing the corresponding product objective is evident. Equally evident is the appropriateness of the frequency with which the process was performed.

Objective 1-2.9:

At the conclusion of the year 40% of the students will be 80% accurate in adding two numbers in the horizontal or vertical forms. 5 + 4 = 9. $\begin{array}{r}5\\+4\\\hline 9\end{array}$
as measured by paper and pencil test.

Evaluation:

The students solved twelve addition problems written in vertical form and nine addition problems written in horizontal form. They were required to obtain a score of seventeen of twenty-one possible to accomplish the objective.

Table 92

Instructional Objective 1-2.9
N, $\bar{X}$, SD, % at Criterion and t-ratio

N= 20

	Pre	Post
$\bar{X}$	8.0500	18.5000
SD	6.7853	5.1234
% at Criterion	23	45

Difference Between Means	10.4500
df	19
t	5.9933*

* <.001

The results shown in Table 92 indicate that 23% of the students received the score of seventeen on the pre-test required for satisfaction of the objective, while 45% received such a score on the post-test. In addition, the results of the t-test for correlated data, shown in Table 92, state that the post-test percentage of 45% was high enough to satisfy the criterion of 40% of the class specified in the objective. A significant difference existed at the .001 level between the pre-test and post-test scores. Participation in the bilingual program seems to have affected the students' ability to add horizontally or vertically. Objective 1-2.9 seems to be appropriate for inclusion in the bilingual program. The evaluators recommend that this objective be included in the next year's program.

Objective 1-2.9P:

> The classroom teacher will evaluate each child individually at the beginning of the year, and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

All first grade teachers evaluated each child individually, either formally or informally, at the beginning of the school year and then grouped them for instruction in arithmetic. Appropriate exercises which were directed toward acquisition of skills to add vertically and horizontally were provided at least once a week for the following percentage of time:

December	- 87%
January	- 88%
February	- 100%
March	- 95%
April	- 100%
May	- 77%

This high frequency of performance of the process objective is congruent with the accomplishment of the corresponding product objective. In addition, process 1-2.9P seems to be appropriate for the accomplishment of product objective 1-2.9. The evaluators recommend that this process objective be included in the next year's program in its present form.

Objective 1-2.10:

> At the conclusion of the year 30% of the students will be 80% accurate in column addition with three addends with sums through twelve as measured by a paper and pencil test.

Evaluation:

Students were given a worksheet containing twelve problems involving column addition with three addends. Students were required to obtain a score of ten of twelve items correct to accomplish objective 1-2.10. A t-test for correlated data was performed on the two sets of scores and summarized in Table 93.

Table 93 indicates that the students accomplished the objective on the post-test but not on the pre-test. Eighteen percent of the students on the pre-test and 72% of them on the post-test were 80% accurate in column addition. A significant difference, as shown in Table 93, was found between the pre-test and post-test scores, a difference which could have occurred by chance less than one time in 1,000. These results in Table 93 suggest

Table 93

Instructional Objective 1-2.10
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 24

	Pre	Post
$\overline{X}$	5.6250	9.3333
SD	4.2112	2.9533
% at Criterion	18	72

Difference Between Means	3.7083
df	23
t	4.8480*

* <.001

that the program had a positive impact on the students' acquisition of skill in column addition with three addends. The evaluators recommend the inclusion of this objective in the 1971-72 program, as it seems to be an appropriate one for first grade students. Objective 1-2.10 was accomplished.

Objective 1-2.10P:

> The classroom teacher will evaluate each child individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

All first grade students were evaluated individually at the beginning of the year, and then grouped for instruction in arithmetic. Appropriate exercises directed toward skill in column addition with three addends were performed at least once a week for the following percentage of time:

December - 12%
January - 11%
February - 45%
March - 39%
April - 80%
May - 59%

Although the frequency of performance of process 1-2.10 was generally less than one-half its projected frequency, its performance seems to have been sufficient for the accomplishment of the corresponding product objective. The evaluators suggest that the project staff review process objective 1-2.10 and determine if performance of the process activity should be required less frequently. The process itself, however, and the activities involved seem to be appropriate for the accomplishment of product objective 1-2.10.

Objective 1-2.11:

> At the conclusion of the year 40% of the students will be 80% accurate in two-digit addition of three addends with no remaining. This will be measured by paper and pencil tests.

Evaluation:

Students were asked to solve twelve problems involving column addition of three addends, each with two digits. Students were required to answer ten of twelve problems correctly to accomplish objective 1-2.11. A satisfactory percentage of students did not accomplish the objective on either the pre-test or the post-test. Only 5% of the students were 80% accurate in their responses to the worksheet of problems on the pre-test, and only 13% were 80% accurate on the post-test, as shown in Table 94.

Table 94

Instructional Objective 1-2.11
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 19

	Pre	Post
$\overline{X}$	0.5263	6.7368
SD	2.2329	4.5750
% at Criterion	5	13

Difference Between Means	6.2105
df	18
t	5.8369*

* <.001

A t-test for correlated data was performed to determine if program participation had any impact on this skill; the analysis is presented in Table 94. A significant difference between the students' pre-test and post-test scores existed. This observation suggests that the criterion level of 40% of students required to accomplish the objective may be too high. Or a review of process may reveal lack of exercises directed at acquisition of this skill. The evaluators recommend that the project staff review this objective and consider changing the criterion level so that it is in line with the results of the measurement of this objective, if the process is appropriate. Objective 1-2.11 was not accomplished.

Objective 1-2.11P:

> The classroom teacher will evaluate each child individually at the beginning of the year, and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

First grade children were evaluated and grouped for instruction at the beginning of the year. Arithmetic activities began at that time, but teachers reported to the evaluator that activities focusing on column addition with three addends, each with two digits, were the focus of activities only in the latter part of the year. The percentage of teachers who performed appropriate activities and provided exercises at least once a week supports this comment:

December - 0%
January - 0%
February - 18%
March - 0%
April - 35%
May - 44%

For the most part these percentages indicate a trend toward more frequent use of activities which focused on the addition of three two-digit addends as the year progressed. The fact that the criterion level specified in the product objective was accomplished, further suggests that this objective is not necessarily appropriate for first grade children. The evaluators recommend that a review of the appropriateness of both process and product objective 1-2.11P and 1-2.11 occur. The program staff should consider either a more frequent performance of the process by the first grade teachers.

Objective 1-2.12:

> At the conclusion of the year 60% of the students will be 80% accurate in two-digit addition of two addends with no remaining, using expanding notion.
>
> $$\begin{array}{l} 32 = 30 + 2 \\ \underline{24 = 20 + 4} \\ \qquad 50 + 6 = 56 \end{array}$$
>
> This will be measured by a paper and pencil test.

Evaluation:

Students were required to solve ten of twelve addition problems of two addends with no remaining using expanded notation to satisfy objective 1-2.12. A t-test for correlated data was used to compare the pre-test and post-test scores in this measure; this analysis is summarized in Table 95.

Table 95

Instructional Objective 1-2.12
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 27		
	Pre	Post
X	0.0000	3.5185
SD	0.0000	3.4999
% at Criterion	0	29
Difference Between Means		3.5185
df		26
t		1.0053*

* Not Significant

Table 95 reports that the students did not accomplish this objective. No students satisfied the criterion on the pre-test, and only 29% of the students solved the required ten problems on the post-test. In addition, no significant difference existed between the pre-test and post-test scores. The evaluators note that a review of this objective and its appropriateness for inclusion in the first grade curriculum should be made. Either a lowering of the criterion percentage should be considered, or revisions in the process activities directed at this objective should be made. The program seems to have had very limited impact on the achievement of objective 1-2.12.

Objective 1-2.12P:

> The classroom teacher will evaluate each child individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

The first grade classroom teachers evaluated the children individually at the beginning of the year on their arithmetic skills; they were then grouped for instruction. Teachers provided appropriate exercises directed toward the students' acquisition of skill in adding in expanded notation at least once a week for the following percentage of the time:

December - 6%
January - 98%
February - 9%
March - 30%
April - 70%
May - 91%

No decisive pattern of performance frequency is evident; this may explain the lack of significant difference between the pre-test and post-test scores on product objective 1-2.12. It is imperative that a review of the processes used for the accomplishment of this product objective be made. It also seems possible that the process performed for objective 1-2.11P were not appropriate for the accomplishment of objective 2.12.

Objective 1-2.13:

> At the conclusion of the year, 60% of the class will be 90% accurate in using the number line for addition. This will be measured by a paper and pencil test.

Evaluation:

Table 96 shows the results of the t-test for correlated data used to assess objective 1-2.13. Table 96 also indicates that 11% of the students achieved the objective on the pre-test, and 36% accomplished it on the post-test. These students were assessed on this objective by their solutions to twelve problems involving the use of the number line to find a sum. Students were required to answer eleven of twelve questions correctly.

Although a sufficient percentage of the students did not reach the criterion level specified in the objective, a significant difference existed between the pre-test and post-test scores. The pattern of performance suggests the recommendation that the project staff should review the appropriateness of the criterion level included in the objective. The fact that a significant gain occurred between pre- and post-testing suggests that the bilingual program had some impact on the

Table 96

Instructional Objective 1-2.13
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 19

	Pre	Post
$\overline{X}$	2.9473	9.9473
SD	3.8040	2.3503
% at Criterion	11	36

Difference Between Means	7.0000
df	18
t	8.0589*

* <.001

students' ability to use the number line for addition. The project should consider revising the criterion level of 60% to make it more in line with the ability of students. In this case this would require lowering the criterion percentage. Objective 1-2.13 was not accomplished.

Objective 1-2.13P:

> The classroom teacher will evaluate each child individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

Evaluation and grouping of students occurred at the beginning of the school year. Teachers provided appropriate exercises directed at the students' use of the number line for addition at least once a week for the following percent of time:

December	- 75%
January	- 82%
February	- 81%
March	- 82%
April	- 85%
May	- 62%

The evaluator feels that this high frequency of process performance suggests the possibility that the particular activities used may not be appropriate for accomplishing the corresponding product objective. Because a satisfactory percentage of students did not accomplish objective 1-2.13 even though the process 1-2.13P was, for the most part, performed, the activities involved in this process may not be appropriate for the accomplishment of the product objective or that once a week is too infrequent a performance. The evaluators recommend that a review of objective 1-2.13P occur, with the consideration of implementing a more highly structured monitoring and use of this process in the classroom.

Objective 1-2.14:

> At the conclusion of the year 40% of the students will be 80% accurate in subtracting zero from a

number and the number from itself. This will be measured by a paper and pencil test.

Evaluation:

Students solved fourteen subtraction problems which required either subtracting zero from a number or subtracting a number from itself. Students were required to answer twelve of fourteen questions correctly in order to accomplish objective 1-2.14. A t-test for correlated data was used to compare the pre-test and post-test scores; the analysis is summarized in Table 97.

Table 97

Instructional Objective 1-2.14
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 27

	Pre	Post
$\overline{X}$	2.8888	12.4074
SD	3.9189	2.9471
% at Criterion	3	62

Difference Between Mean	9.5186
df	26
t	9.9671*

* <.001

The results shown in Table 97 state that 3% of the students could perform the subtraction activity on the pre-test, while 62% of the students received the score of twelve required by the objective on the post-test. In addition, a highly significant difference at the .001 level existed between the pre-test and post-test scores. Because 62% of the students accomplished the objective on the post-test, a higher percentage than the 40% required by the objective, and because a significant difference existed between the two sets of scores, participation in the bilingual program had a positive effect on the students' ability to subtract zero from a number and a number from itself. The evaluators recommend that this objective be included in the project for the next program year. Objective 1-2.14 was accomplished.

Objective 1-2.14P:

> The classroom teacher will evaluate each child individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

The first grade teachers evaluated each child individually at the beginning of the year and then grouped them for instruction in the arithmetic skills. Appropriate exercises directed toward subtraction of zero from a number or a number from itself were performed at least once a week for the following percentage of time:

December	- 62%
January	- 58%
February	- 90%
March	- 86%
April	- 95%
May	- 67%

This frequent performance of objective 1-2.14P explains the accomplishment of its corresponding product objective. Because objective 1-2.14 was accomplished, it seems reasonable to conclude that the process used to achieve it was appropriate. The evaluators recommend that this process be documented and included in the instructional program for the next project year.

Objective 1-2.15:

> At the end of the year 40% of the students will 80% of the time accurately complete two-digit subtraction with no re-grouping. This will be measured by a paper and pencil test.

Evaluation:

Students completed a worksheet of twelve subtraction problems, described as two-digit subtraction with no re-grouping. Students were required to solve ten of twelve problems correctly to accomplish the objective. The percentage at criterion and the t-test for correlated data used to compare pre- and post-test scores are presented in Table 98.

Table 98

Instructional Objective 1-2.15
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 25

	Pre	Post
$\overline{X}$	0.4000	6.7200
SD	1.9595	3.9549
% at Criterion	4	25

Difference Between Means	6.3200
df	24
t	7.3676*

* <.001

The results summarized in Table 98 report that the appropriate percentage of the students did not accomplish the objective. Only 25% of the students satisfied objective 1-2.15 on the post-test, whereas 40% of the students were required to do so for the program to accomplish the objective. Because a significant difference existed between the pre-test and post-test scores, the required percentage of students might be too high for the program. Program participation, therefore, seemed to have some impact on the students' skill in solving two-digit subtraction problems with no re-grouping. The evaluators recommend that, in light of this data, the project staff should review the appropriateness of the percentage of 40% specified in the product objective. Objective 1-2.15 was not accomplished.

Objective 1-2.15P:

> The classroom teacher will evaluate each child individually at the beginning of the year, and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

Each student was evaluated at the beginning of the year by his classroom teacher and grouped for instruction in arithmetic. Teachers provided exercises directed at learning subtraction skills for two-digit numbers without re-grouping at least once a week for the following percentage of time:

December - 18%
January - 11%
February - 18%
March - 8%
April - 30%
May - 71%

This low frequency of performance of process 1-2.15P perhaps explains the reason objective 1-2.15 was not accomplished. The actual activities performed seemed to be appropriate, however, as a significant difference existed between the pre-test and post-test scores, suggesting that the program had some impact on the students' skill in this type of subtraction. The results also suggest, however, that a greater frequency of performance of the process activity might have helped a larger percentage of students to achieve the objective.

Objective 1-2.16:

At the end of the year 40% of the students will be 80% accurate in measuring line segments of foot, inch and half-inch. This will be measured by teacher rating and observer checklist.

Evaluation:

Students were requested to complete a worksheet which asked them to measure three line segments using the measurements foot, inch, and half-inch. In order to accomplish objective 1-2.16 the students were required to answer all three questions correctly. A t-test for correlated data compared the pre-test and post-test scores; the analysis is summarized in Table 99.

Table 99

Instructional Objective 1-2.16
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 26		
	Pre	Post
$\overline{X}$	0.5384	3.3076
SD	0.7956	1.1692
% at Criterion	0	17
Difference Between Means		2.7692
df		25
t		10.9758*

* <.001

Table 99 indicates that no student accomplished the objective on the pre-test, and 17% of the students performed the objective on the post-test. This percentage was not significant for the accomplishment of the objective by the program, as 40% of the students were required to do so. It is important to note that a highly significant difference existed, however, between the pre-test and post-test scores, a difference which could have occurred by chance less than one time in 1,000. This statistic suggests that the criterion level established in the objective may be too high for the program population. The program did seem to have a positive impact on the students' ability to know the concepts foot, inch, and half-inch. A review of the criterion of 40% required in the objective should be made. Reference to the discussion on the process directed toward accomplishing this objective may also indicate why the appropriate percentage of students were not able to perform this objective. Objective 1-2.16 was not accomplished.

Objective 1-2.16P:

> The classroom teacher will evaluate each child individually at the begining of the year, and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

Students' abilities in performing arithmetic skills were evaluated at the beginning of the year. The students were then grouped for instruction. Teachers provided appropriate exercises directed at learning the concepts of foot, inch, half-inch at least once a week for the following percentage of time during the period when process activities were monitored:

December - 12%
January - 11%
February - 18%
March - 8%
April - 30%
May - 19%

Interviews with classroom teachers indicated that the reason for such a low frequency of performance of process 1-2.16 was the difficulty of this measurement for the first grade students. This comment confirms the reason for the lack of achievement of the corresponding product objective. The evaluators recommend a determination of the appropriateness of the product and process objective 1-2.16 and 1-2.16P for inclusion in the first grade curriculum.

Objective 1-2.17:

> At the conclusion of the year 60% of the students will be 80% accurate in distinguishing pints and quarts. This will be measured by teacher rating and observer checklists.

Evaluation:

The students were required to answer eight questions, two of which involved determining the number of pints which equalled a quart and the number of quarts which equalled a pint. The remaining six questions involved identifying the larger of two measures using the concepts of pints and quarts. Students were required to answer seven of the eight questions correctly in order to accomplish objective 1-2.17. A t-test for correlated was employed to analyze the scores; its summary is presented in Table 100.

Table 100

Instructional Objective 1-2.17
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 27		
	Pre	Post
$\overline{X}$	2.1481	6.5185
SD	1.2081	1.2582
% at Criterion	0	52
Difference Between Means	4.3704	
df	26	
t	14.2265*	

* <.001

The results in Table 100 note that no student could perform objective 1-2.17 on the pre-test, while 52% of the students could perform it on the post-test, although this percentage does not satisfy that required by the objective for the program's accomplishment of the objective. However, a significant difference at the .001 level existed between the pre-test and post-test scores. These results suggest that participation in the bilingual program had a significant impact on the students' ability to distinguish pints and quarts. The evaluators recommend that the program review the appropriateness of 60% of the students required to accomplish the objective, although such a large percentage may be appropriate because almost 60% accomplished the objective. A review of the frequency of the process objective may indicate why a larger number of students did not accomplish the objective. Objective 1-2.17 was not accomplished.

Objective 1-2.17P:

> The classroom teacher will evaluate each child individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

Students were evaluated individually and grouped for arithmetic instruction at the beginning of the school year. Teachers provided appropriate exercises for learning the concepts of pints and quarts at least once a week for the following percentage of time:

December - 0%
January - 98%
February - 27%
March - 4%
April - 25%
May - 16%

This low frequency of performance of process 1-2.17P explains the reason for the lack of accomplishment of objective 1-2.17. The evaluators note that this process seems to be appropriate for the accomplishment of the corresponding product objective because of the significant difference between pre and post scores. The evaluators recommend, however, that a closer monitoring of the frequency of performance of this process objective be done to insure that the teachers discuss the concepts of pints and quarts more frequently than they did during the current program year.

Objective 1-2.18:

> At the conclusion of the year 80% of the students will be 80% accurate in recognizing the concepts of day, week, month, and year. This will be measured by teacher rating and observer checklist.

Evaluation:

Students were asked a series of six questions about the concepts of day, week, month, and year. They were required to answer five of the six questions correctly to accomplish the objective.

The results shown in Table 101 indicate that no student achieved the criterion on the pre-test, and no student achieved the criterion on the post-test. However, the t-test for correlated data summarized in Table 101 showed that a significant

Table 101

Instructional Objective 1-2.18
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 25

	Pre	Post
$\overline{X}$	0.4000	0.9200
SD	0.5656	1.0166
% at Criterion	0	0

Difference Between Means	0.5200
df	24
t	2.8337*

* <.01

difference existed between the pre-test and post-test scores. These results suggest participation in the program had some impact on the students' knowledge of the concepts of day, week, month, and year, but not as significant an impact as possible. The evaluators recommend that the program staff review the appropriateness of the objective. They should consider the criterion level specified and whether the concept itself is an appropriate one for teaching in the grade one classes. Objective 1-2.18 was not accomplished.

Objective 1-2.18P:

> The classroom teacher will evaluate each child individually at the beginning of the year, and group children for instruction Teachers will

provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

All first grade teachers evaluated each child in their class individually at the beginning of the year. Children were then grouped for instruction. Teachers provided activities directed toward learning the concepts of day, week, month, and year at least once a week for the following percentage of time:

December - 62%
January - 70%
February - 81%
March - 82%
April - 95%
May - 72%

These percentages suggest that the lack of accomplishment of product objective 1-2.18 probably cannot be attributed to the failure of teachers to perform the process objective as stated. It seems that either the product criterion level is inappropriate, or that performing the process once a week was not sufficient. The evaluators recommend that a review of process objective 1-2.18P occur.

Objective 1-2.19:

At the conclusion of the year 80% of the students will be 80% accurate in using time concepts of hour and half-hour in the classroom. This will be measured by teacher rating and observer checklist.

Evaluation:

This objective was tested by requiring students to identify the time on a series of five clocks. In order to accomplish objective 1-2.19 students were required to answer four of five questions correctly. Table 102 indicates that 3% of the students could perform the objective on the pre-test, while 40% of the students could perform it on the post-test.

Table 102

Instructional Objective 1-2.19
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 27

	Pre	Post
$\overline{X}$	1.4814	3.5555
SD	1.1343	0.8315
% at Criterion	3	40

Difference Between Means	2.0741
df	26
t	10.0635*

* <.001

In spite of the fact that the criterion level of 80% specified in the objective was not obtained, and that objective 1-2.19 was not accomplished, a significant difference existed between the pre-test and post-test scores as shown by the t-test for correlated data summarized in Table 102.

Based on this data, the evaluators recommend that the project staff review the appropriateness of the project objective. A review of the process and its frequency may also indicate more clearly why the product was not obtained. Objective 1-2.19 was not accomplished.

Objective 1-2.19P:

> The classroom teacher will evaluate each child individually at the beginning of the year and group children for instruction. Teachers will provide appropriate exercises and opportunities to perform at least once a week. These activities will be recorded in the lesson plan book.

Evaluation:

Children were tested individually at the beginning of the year, either formally or informally; instructional groups were then formed. Teachers provided appropriate exercises for learning the concepts of half-hour and hour at least once a week for the following percentage of time:

December - 6%
January - 41%
February - 63%
March - 47%
April - 75%
May - 34%

These percentages indicate that, for the most part, the teachers were performing the process less than one-half as frequently as they should have been performing it. These results suggest to the evaluators that a more careful monitoring of the performance of process 1-2.19 should occur, if indeed it is considered to part of an appropriate objective. The evaluators recommend that an immediate review of this process occur; if it is included in the program for the next project year, a careful structuring of its use in the classroom should be made and enforced.

Objective 1-3.1:

> The student will demonstrate a comfortableness with French in the classroom as demonstrated by 90% of the class showing willingness to participate at least once in class discussion. This will be recorded by observer checklist.

Evaluation:

This objective was measured by the teachers' presenting a group of French speaking children a brief paragraph in French which ended with a question. Children were asked to respond to the question. Their use of standard expressions and pronounciations was also monitored. Students received credit for the objective if they participated in the conversation. A sign test for correlated data was used to compare the pre-test and post-test scores; this analysis is summarized in Table 103.

Table 103 indicates that 76% of the students demonstrated a comfortableness with French in the classroom on the pre-test, while 70% of the students demonstrated such a comfortableness on the post-test. No significant difference existed between the pre-test and post-test scores. Neither pre-test nor post-

Table 103

Instructional Objective 1-3.1
Summary of Sign Test for Correlated Data and Percent at Criterion Level

Number with Pre and Post Scores	20
Number Showing Positive Change	4
Number Showing Negative Change	0
z	1.5000
p	not significant
% at Criterion-Pre	56
% at Criterion-Post	70

test percentage was sufficiently high to satisfy the 90% specified in the objective. The program seems to have had a limited impact on the students comfortableness with French in the classroom. Since this seems to be a very important goal of the bilingual program, the evaluators recommend that the project staff review this objective. Simultaneously a review of the accompanying process should be made to determine the best way for accomplishing objective 1-3.1. Appropriate changes should then be implemented. Objective 1-3.1 was not accomplished.

Objective 1-3.1P:

> The teacher will provide daily opportunity for discussion in French. The teacher will not discourage the children's use of their patois French. Activites will be recorded in the lesson plan book.

Evaluation:

Interviews with teachers and on-site observation of classes indicated that they provided daily opportunities for discussion in French. In addition, the teachers did not discourage the children's use of their patois French. Activities were provided daily for the the following percentage of time:

December - 68%
January - 88%
February - 54%
March - 65%
April - 90%
May - 69%

Because the process was performed frequently, and product objective 1-3.1 was not accomplished, the possibility of a need for restructuring process objective 1-3.1P is evidenced. The evaluators recommend that this type of restructuring occur. Since the corresponding product objective seems to be such an important one for a bilingual program, the project staff should work on the means for accomplishing this objective. As suggested by the project staff, the status of product and process objective 1-3.1 and 1-3.1P reflects the need for a French specialist to structure French instruction.

Objective 1-3.2:

> Students will demonstrate standard expression and pronounciation. At the end of the year the teacher will ask questions with standard response patterns as noted by teacher ratings and observer checklists.

Evaluation:

This objective was measured by presenting the student with a series of ten commands in standard French. The student was expected to respond to the command with the appropriate action. In order for the objective to be accomplished, all students were required to respond to all commands correctly. Table 104 summarizes the t-test for correlated data used to compare pre-test and post-test scores.

Table 104

Instructional Objective 1-3.2
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 19		
	Pre	Post
$\overline{X}$	6.8421	8.2631
SD	1.5308	1.0685
% at Criterion	0	13
Difference Between Means	1.4210	
df	18	
t	4.0266*	

* <.001

Table 104 indicates that a highly significant difference at the .001 level existed between the pre-test and post-test scores. Yet, neither on the pre-test nor on the post-test did the 100% of the students required by the objective accomplish the objective. Only 13% of the students accomplished the objective on the post-test. Participation in the program seems to have had some effect, however, on the students' ability to demonstrate standard expression and pronounciation, as suggested by the significant difference between the two sets of scores. The evaluators recommend that a review of the criterion level specified in the objective be made to determine its appropriateness for the program, in light of the fact that a significant gain occurred. Objective 1-3.2 was accomplished.

Objective 1-3.2P:

> The audio-lingual method of presentation will be used. At the beginning of the year the teacher will administer orally to a sampling of the class questions which elicit non-standard response patterns. Drill will be provided to the class as a group, using choral, half-choral, and individual response patterns. Children needing additional drill will utilize the language master, using response cards prepared by the project director. The activities will be recorded in a lesson plan book.

Evaluation:

Monitoring of first grade classrooms indicated that the audio-lingual method of presentation was used. At the beginning of the year the teachers administered questions which elicit non-standard response patterns. Drills involving full choral, half-choral, and individual response patterns were then used to practice standard French pronounciation and expression. Children requiring additional drills utilized the Parlons Francais Kit and teacher-made language master cards. Although no frequency of activity is specified in the process objective, a determination of the percentage of time in which process 1-3.2P was performed at least once a week was made as follows:

December	- No record of process exists
January	- 82%
February	- 72%
March	- 91%
April	- 95%
May	- 61%

The failure to accomplish product objective 1-3.2 suggests that either this frequency of performance of the process was not sufficient and should be drastically increased, or that the particular activities involved in the process were not appropriate. The evaluators suggest that a review of these two possibilities occur.

Objective 1-3.3:

> Students will show a statistically significant ($p<.05$) improvement in French vocabulary recognition, as noted by a French vocabulary test (either standardized or teacher-made).

Evaluation:

Table 105 presents the analysis of data gathered from the assessment of the objective, a t-test for correlated data. Table 105 indicates that the students demonstrated a statistically significant improvement in French vocabulary recognition, not at the .05 level, but at the .001 level. This statistic

Table 105

Instructional Objective 1-3.3
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 27

	Pre	Post
$\overline{X}$	6.4074	9.3703
SD	2.3295	0.5935

Difference Between Means	2.9629
df	26
t	7.8135*

* <.001

suggests that the program had a positive impact on the students' skills in French vocabulary recognition. Each student's ability was measured by asking him to identify in French a series of ten objects. No criterion level was specified in this objective. Objective 1-3.3 was accomplished.

Objective 1-3.3P:

> Vocabulary will be introduced within the framework of classroom activites. The classroom teacher will prepare for each new vocabulary word a visual representation card. Peer teaching will be used for drill followed by utilization of the language master for students needing additional drill. The activities will be recorded in the lesson plan book.

Evaluation:

Interviews with teacher and observation of first grade classrooms indicated that teachers introduced vocabulary within the framework of classroom activities. Visual representation cards were prepared for new words. In addition, language master cards, the *Parlons Francais Kit*, and the *Talking Dictionary Kit* were used with students requiring additional drill. Although process 1-3.3P does not specify the frequency with which it is to be performed, a measure of those classes which performed it at least once a week indicated the following percentage of required time devoted to objective 1-3.3P:

December - No record of process exists
January - 76%
February - 54%
March - 91%
April - 95%
May - 62%

Because product objective 1-3.3 was accomplished, it is reasonable to conclude that the processes used to accomplish it, that is, process objective 1-3.3P, were appropriate. The evaluators recommend that this process be included intact in the project for the next program year.

Objective 1-3.4:

> First grade students will learn to read simple sentences; presented any pages of basic French reading text, 20% of the students will be able to read the material orally with standard pronounciation, with no more than one error per line. This will be measured by teacher rating and observer checklist.

Evaluation:

Due to an oversight on the part of the evaluation team, no determination of the status of this objective was made.

Objective 1-3.4P:

> Reading process will be outlined by teachers during the summer.

Evaluation:

The reading process was not outlined during the summer of 1970 because of the late beginning of the Title VII project. Some attempts were made during the school year to outline the reading process. Interviews with teachers and other project staff, however, indicate the need for a specialized person, an expert in French curriculum, to be involved in developing the reading process. The evaluators recommend that such a person be hired for inclusion on the project's staff for the next project year.

Objective 1-4.1:

> 50% of the monolingual English students will show comprehension of simple classroom commands and procedures presented orally in French by the teacher by their ability to perform those commands. This will be measured by teacher rating and observer checklist.

Evaluation:

Students were measured on objective 1-4.1 as a post-test only. They were presented a series of four commands in French and were required to respond to those with appropriate actions. The highest possible score a child could obtain was four correct; this score was required for accomplishment of the objective. All four students tested received a perfect score on the measure. Therefore, objective 1-4.1 was accomplished.

Objective 1-4.1P:

> An audio-lingual approach will be used, coupled with the use of pattern drills programmed on cassettes and the language master. Activities will be carried out daily and recorded in the lesson plan book.

Evaluation:

Monitoring of grade one classrooms for French instruction indicated that an audio-lingual approach was used for teaching French vocabulary and commands in French. This approach was coupled with the employment of pattern drills programmed on cassettes and the language master. The teachers provided appropriate exercises to be carried out daily for the following percentage of time:

December - 50%
January - 58%
February - 54%
March - 82%
April - 85%
May - 71%

Although teachers did not perform process 1-4.1P as frequently as was required by the process objective, their frequency of performing it seemed to be adequate as the corresponding product objective 1-4.1 was accomplished.

Objective 1-4.2:

> 100% of the English speaking students will be able to sign at least three songs and play three sFrench games. This will be measured by teacher rating and observer checklist.

Evaluation:

The English children were instructed by the teacher or aide to sing a French song and play the corresponding game they had learned during the year. Students were considered as responding correctly if they sang the song and played the accompanying game of six out of six to accomplish objective 1-4.2. No pre-test of this measure was made. The mean score received by the students was 3.75. Of the four students tested, no student accomplished the objective as specified; it should be noted that two of these students had a high absence record. Therefore, program objective 1-4.2 was not accomplished.

Objective 1-4.2P:

> Songs and games to be used will be collected by teachers during the summer. They will practice this activity at least once a week and record it in their lesson plan book.

Evaluation:

Songs and games were not collected during the summer, but during the fall potato harvest vacation. Teachers provided appropriate exercises for practicing French songs and games at least once a week for the following percentage of time:

December - 50%
January - 70%
February - 90%
March - 78%
April - 90%
May - 55%

The fact the product objective 1-4.2 was not accomplished suggests that either the process used to accomplish it or the frequency of the process was not satisfactory. A review of the process indicates that not all teachers were singing French songs and playing French games at least once a week. The evaluators feel that this explains the lack of accomplishment of product objective 1-4.2. The evaluators recommend that a more careful monitoring of the performance of process objective 1-4.2P be made for the next project year.

Objective 1-4.3:

> 75% of the English speaking children will be able to identify orally 75% of the words on the French vocabulary list developed by teachers. Their abilities will be measured by observer checklist and teacher rating.

Evaluation:

Only a post-test to assess this objective was administered to the students. The teacher presented the child with a series of pictures and required the child to identify the picture by stating its French name. The highest possible score a student could receive was ten correct. In order to accomplish the objective, students were required to answer eight items correctly. The mean score on this test was 8.400. One hundred percent of the students received a score of at least eight required by the objective. All five English students who were tested accomplished the objective; therefore, objective 1-4.3 was accomplished.

Objective 1-4.3P:

> Vocabulary will be introduced within the framework of classroom activities. The classroom teacher will prepare for each new vocabulary word a visual representation card. Peer teaching will be used for drill, followed by utilization of the language master for students needing additional drill. The activities will be recorded in the lesson plan book.

Evaluation:

A monitoring of classroom procedures by the evaluator indicated that the teachers were introducing French vocabulary within the framework of classroom activities. In addition, they prepared visual representation cards for new vocabulary words. Language master cards, the Parlons Francais Kit, and the Talking Dictionary Kit were employed with students requiring additional drill. Although no frequency of process is specified in objective 1-4.3P, a measure of those students who performed this process at least once a week was made; the following percentage of time was devoted to this process at stated:

December - No record of process exists
January - 52%
February - 45%
March - 69%
April - 80%
May - 51%

Although these frequencies seem to be rather low, the fact that product objective 1-4.3 was accomplished indicates that the frequency of performing objective 1-4.3P and the activities involved in this process were appropriate for teaching its corresponding product objective.

Objective 1-5.1:

> 100% of the English speaking students will be able to sing at least 3 French songs and play 3 French games. This will be measured by teacher rating and observer checklist.

Evaluation:

The group of students tested for this objective were assessed by being required to sing three French songs and play three French games as directed by the teacher. Only a post-test with a possible score of six correct was administered. This randomly selected group of four students all earned the perfect score of six required by the objective. Therefore, objective 1-5.2 was accomplished.

Objective 1-5.1P:

> Songs and games will be collected by teachers during the summer. They will practice this activity at least once a week and record it in their lesson plan book.

Evaluation:

Songs and games were not collected during the summer, but during the fall potato harvest vacation. Teachers provided appropriate exercises for practicing French songs and games at least once a week for the following percentage of time:

December - 67%
January - 64%
February - 45%
March - 65%
April - 80%
May - 52%

The accomplishment of product objective 1-5.1 suggests that the corresponding process as described above was appropriate.

Objective 1-5.2:

> 90% of the children will be able to tell orally a story about a historical event or person related to the Valley's history. This will be recorded and checked by teachers and evaluators on the checklist.

Evaluation:

The teacher presented each child with a booklet entitled "Les Acadiens" and asked the child to tell her a story by reading the pictures. The students were required to describe ten of eighteen pictures correctly to satisfy the criterion. The test was administered only as a post-test. The mean score on this test was 12.000. Six of eight students, or 75%, who took the test accomplished the objective. Therefore, objective 1-5.2 was not accomplished.

Objective 1-5.2P:

> Appropriate stories about people and events in Valley history will be collected by teachers and used in the classroom on dates that are on or near significant dates for the event of person.

Evaluation:

A booklet entitled "Les Acadiens" was published by the materials development team during the winter, 1971. Until that time, no effort was directed at performing process 1-5.2P. Since that time the teachers presented appropriate stories about people and events in Valley history at least once a week for the following percentage of time: March - 4%, April - 30%, May - 16%. These small percentages explain the failure to accomplish product objective 1-5.2. Since the appropriate material will be available for the next project year, it seems reasonable to conclude that product objective 1-5.2 should be accomplished at that time. The evaluators recommend, however, that a review of the process be made to determine its appropriateness. If it is considered to be appropriate, a more structured use of appropriate stories should be considered so that product objective 1-5.2 will be accomplished.

Objective 1-5.3:

> 90% of the students will be able to identify from a picture at least three landmarks of the Valley area. This will be measured by teacher rating and observer checklist.

Evaluation:

The student was presented with a series of three pictures of historical landmarks in the Valley. They were required to identify each of the three landmarks correctly. A t-test for correlated data was used to compare the pre-test and post-test scores; this analysis is summarized in Table 106.

Table 106 indicates that no student could identify all three landmarks on either the pre-test or the post-test. However, the fact that a significant difference, one that could have occurred by change less than one time in 1,000, existed between the pre-test and post-test scores, suggests that participation in the bilingual program had some impact on the students' knowledge of Valley landmarks. The evaluators recommend that a review of the criterion level specified in this objective be made. In addition, the evaluators suggest that each of the pictures used for the testing of objective

Table 106

Instructional Objective 1-5.3
N, $\overline{X}$, SD, % at Criterion and t-ratio

N= 25		
	Pre	Post
$\overline{X}$	0.0400	2.0000
SD	0.1959	0.0000
% at Criterion	0	0

Difference Between Means	1.9600
df	24
t	10.0051*

* <.001

1-5.3 be examined for their clarity and for their commonness as landmarks in the Valley area. Objective 1-5.3 was not accomplished.

Objective 1-5.3P:

> Teachers will collect pictures of Valley landmarks, e.g. buildings or significant natural resources, and describe them to the children and their importance. These activities will be recorded in the lesson plan book.

Evaluation:

No pictures were collected of Valley landmarks; therefore, process objective 1-5.3P was not accomplished as specified. In

April 5% of the teachers presented activities about Valley landmarks, and in May 9% of the teachers structured such activities. The fact that objective 1-5.3 was not accomplished indicates that this frequency of performing activities related to identification of Valley landmarks was not sufficient. This process objective should be reviewed. If its corresponding product objective is included in the next program year, the evaluators suggest that the project staff monitor a more frequent introduction of pictures of Valley landmarks into the curriculum.

INSTRUCTIONAL COMPONENT: COMMENDATIONS AND RECOMMENDATIONS

Commendations

The data gathered about the accomplishment of the instructional product and process objectives indicate to the evaluators that the project should be commended on the following outcomes of the instructional component:

1. The accomplishment of a large number of product objectives.
2. The general appropriateness of the process activities and frequency of performance as indicated by the accomplishment of the corresponding product objectives.
3. The excellent performance of the students on the standardized tests.
4. The high degree of readiness for grade one work demonstrated by the majority of kindergarten students on the Metropolitan Readiness Test.
5. The excellent cooperation of the teachers in constructing and administering the tests.

Recommendations

The failure to accomplish a number of the product objectives of the Instructional Component suggests that some changes should be implemented in these activities. The evaluators recommend that the following activities be performed so that all product objectives of the Instructional Component will be accomplished in future programs:

1. The cumbersome quality of the testing procedure used to assess the specific instructional product objectives recommends the need for restructuring of this measurement procedure.

2. Objectives which were accomplished at both the pre-testing and post-testing should be reviewed; they should either be eliminated from the program or the criterion level specified in the objective should be raised.

3. The frequency of the processes directed toward objectives which were not accomplished during the program but which showed significant difference between pre and post performance of students should be increased.

4. The process directed toward those objectives which were not accomplished and for which no significant difference existed in student performance between pre- and post-testing should be reviewed; changing the specific process activities or increasing the frequency of their performance should be considered and implemented.

5. A reconsideration of the appropriateness of some of the standardized tests for administration to students in kindergarten and grade one should be made, and appropriate revisions in the program implemented.

6. A documentation of the particular process activities directed toward all product objectives should be made by the teachers and placed in the project files.

7. A review should be made of the frequency of process specified in all process objectives; revisions of the frequency stated should be made based on data gathered during the 1970-71 evaluation.

8. More effort should be directed toward teaching French in the classrooms.

STAFF DEVELOPMENT COMPONENT: EVALUATION OF SPECIFIC OBJECTIVES

Objective SD-1.1:

> The director will display an openness and willingness to work with others in the project and produce educational change as measured by an average rating of three or higher on a five point rating given by the other project members, community, consultants, and administration.

Evaluation:

A questionnaire was distributed to a sample of project members, community members, consultants, and members of the local school districts' administrations. Table 107 summarizes the results of the questionnaire.

As shown in Table 107, on nine of the ten qualities, 100% of the respondents assigned a rating of three or better to the project director. On the quality "considers suggestions offered by others" a small percentage, 14%, assigned a rating of two. Although this rating does not prevent the objective from being achieved, it does suggest an area of improvement for the project director. The project director should be commended on the highly positive ratings he received from members of the community and project staff. Objective SD-1.1 has been accomplished.

Table 107

Rating of Project Director's Openness and Willingness to Work with Others in the Project

Personality Trait	% Response of Rating				
	1	2	3	4	5
1. listens to new ideas	0	0	14	57	29
2. willingness to work with others	0	0	0	57	43
3. open to educational change	0	0	0	0	100
4. tries educational innovations	0	0	0	15	85
5. flexible in project direction	0	0	29	29	42
6. easy to work with	0	0	14	28	58
7. accessible to hear problems	0	0	0	28	58
8. considers suggestions offered by others	0	14	14	14	58
9. willing to initiate program change	0	0	14	14	72
10. accepts constructive criticism	0	0	42	29	29

Objective SD-1.1P:

> The project director will participate in a human relations laboratory. This lab should preferably be a community development laboratory.

Evaluation:

The project director did participate in a human relations laboratory during the summer of 1968. This four-week human development institute focused on group support, confidence build-up, conflict resolution, communication, and interpersonal staff development. The project director was one of 50 teachers and administrators who participated in the institute, which was directed by five trainers. Objective SD-1.1P has been completely accomplished.

Objective SD-1.2:

> The project director, executive committee, Title 3 project director and the curriculum specialist will demonstrate an ability to work together in achieving the operational goals of the project, as measured by a majority of favorable comments during interviews and observer ratings.

Evaluation:

In order to measure objective SD-1.2, a questionnaire was distributed to the executive committee of the project, the Title III project director, and the Title VII curriculum specialist. Four of the ten questionnaires were returned. In general, the four respondents were highly satisfied with the information they had about the project and with the dissemination of information in the project. The four respondents all felt that they knew about project activities, were well informed about project evaluation, and that positive lines of communication had been established. Similarly all four respondents indicated that they had confidence in the director's decisions, and felt that he had met up to their expectations.

They all agreed that they had true insight into the financial management of the project. A smaller number, three-fourths of the respondents, indicated that they were well informed about management of funds and classroom activities. These same three respondents also reported that they thought enough publicity was being given Title VII in their school district. Only two respondents, however, felt that the parents were well informed. Only one respondent felt that the Board of Directors meets often enough. These last two responses suggest the recommendation for the project: the project director should consider betters ways of informing the parents, if indeed this is still a problem; he should also examine the frequency of meetings with the Board of Directors to determine if it is sufficient.

A subjective rating of the project director's ability to work work with members of the executive committee, the Title III project director, and the curriculum specialist was made by the on-site project evaluator. He recorded that the director was generally diplomatic with the people cited above, kept lines of communication open at all times, and was highly cooperative with them. The responses on the questionnaire and the subjective ratings of the evaluator indicate that objective SD-1.2 has been satisfied.

Objective SD-1.2P:

> A fellow of NTL will be employed to conduct a sensitivity laboratory for the executive committee, the project director, the director of the ESEA 3 project, and the curriculum specialist. Prior to this laboratory the NTL consultant will spend five days interviewing principals, teachers, and students.

Evaluation:

The NTL sensitivity lab was not held during the 1970-71 school year because the project began too late to make arrangements for this lab. Therefore, the NTL consultant was not available for interviewing principals, teachers and students. An interview with the project director revealed that he still feels the need that for such a laboratory to be held for the executive committee and the curriculum specialist. He anticipates sending these individuals to such a lab during the following school year. Objective SD-1.2P was not accomplished. The evaluators recommend a review of its feasibility and possible implementation for 1971-72 school year. It should be noted, however, that, although objective SD-1.2P was not accomplished, the product objective SD-1.2 was accomplished. The actual relation of the process objective in this case to the product objective should be investigated. Perhaps a different product objective should be structured to result from process SD-1.2P.

Objective SD-1.3:

> The director and his staff (principals and teachers) will demonstrate an ability to work together in achieving the operational goals of the project, as measured by the majority of favorable comments during interviews and observer ratings.

Evaluation:

A questionnaire was constructed and distributed to members of the project staff to serve as the interviews for the measurement of objective SD-1.3. The responses of the project staff suggest their ability to work with the director in achieving the operational goals of the project. All of the teachers and principals who returned the questionnaire felt that the lines of communication had been opened between them and the project director. Similarly, all teachers were satisfied with the number of visits to their school by the project director. They all agreed that the project director was providing support for the French language program in their school.

Mixed ratings about the director's fairness and openness, however, occurred. Sixty percent of the teachers felt that the director was open to suggestions, while 40% indicated that he was not. Similarly, 60% of the teachers felt the director was fair in dealing with them, while 40% felt he was not. Eighty percent of the teachers, a slightly larger percentage, indicated that the director had furnished them with the materials he promised them. All of the respondents agreed that the director was following the project objectives; yet 73% of the teachers indicated that they had not been consulted to satisfactory degree concerning the purchase of materials required in their school.

The subjective views of the on-site evaluator based on his observations of the program operation supported the responses of the teachers. He indicated that the project director seemed to be open to suggestions by the project staff and principals of the schools. He also indicated that the lines of communication between these personnel had been opened. He stated that the project director was generally following the goals and objectives of the Title VII project and that he often consulted the teachers and principals about the materials required by the system. The on-site evaluator, however, did not feel that the project director visited some school systems, especially SAD #24, as frequently as he should.

The highly positive rating of the director by the project staff, in which at least 50% of the teachers rated him positively on each dimension of the scale, and the positive rating by the on-site evaluator of his actions and his ability to work with the project staff suggest that objective SD-1.3 has been accomplished. The evaluators do recommend, however, that the project director consider making more frequent and regular visits to the various school districts, especially SAD #24.

Objective SD-1.3P:

> During the fall vacation a needs assessment and staff involvement workshop, which includes the principals, staff and aides in the program will be held.

Evaluation:

A needs assessment and staff involvement workshop was held on October 5 - 9, 1970. A description of the workshop and a list of participants are included in the director's log; thirteen teachers, ten teacher aides, and five principals participated in the workshop. The purpose of the workshop was to increase the self-knowledge of the participants, to inform them of the individuality of the human being, to teach them about competition and cooperation, and to familarize them with innovative curriculum.

A questionnaire was distributed to the workshop participants in order to obtain their reactions to it. The majority of reactions to all aspects of the workshop were positive. Eighty-seven percent of the teachers felt the workshop time was used efficiently. The same percentage was satisfied with the consultants and felt that the workshop was well planned. Ninety percent of the participants responded that as a result of the workshop they were better prepared to defend Title VII; this also suggests that at the end of the workshop they better understood the goals and purposes of Title VII. Similarly, 93% of the participants indicated that the workshop prepared them better to teach the Instructional Component. The majority of participants, 70%, indicated that they enjoyed the third day of the workshop the most. Suggestions for changes in the workshop were highly individual and are recorded in the project files.

In addition to the teachers' favorable responses to the workshop, its value also seems to be in its contributions to the achievement of product objective SD-1.3. It is quite possible that because objective 1.3P was satisfied, objective 1.3 was satisfied. Objective SD-1.3P has been satisfied. Because of the highly positive response to it and because of its contribution to the achievement of the corresponding product objective, the evaluators recommend the consideration of including such a workshop in the program for the 1971-72 year for new teachers, aides and other participants who are new to the program.

Objective SD-2.1:

> The teachers will demonstrate an increased skill in teaching English as a second language, as measured by a statistically significant increase in raw score from pre- to post-tests on an achievement test constructed by the in-service course instructors, as well as improved ratings on classroom performance as measured by observer checklist using expert observers.

Evaluation:

Because of the late start of the St. John Valley Bilingual Program, the focus of the in-service program was on the development of French instruction, rather than on English as a second language instruction. Therefore, objective SD-2.1 has not been met. The evaluators recommend that this objective be included in the staff development component for the 1971-72 year, as English as a second language instruction is a vital part of the bilingual program.

Objective SD-2.1P:

> Pre-service and in-service courses in teaching English as a second language will be provided using expert instructors. Teachers will maintain 90% attendance at the courses.

Evaluation:

Because of the late start of the program, objective SD-2.1P was not performed. Plans for the 1971-72 year include the structuring of such pre-service and in-service courses. The evaluators consider this an essential part of the program and feel that it should be included for the next year.

Objective SD-3.1:

> The teachers will demonstrate an increased skill in teaching French as a first language, as measured by a statistically significant increase in raw score from pre- to post-tests on an achievement test constructed by the in-service course

instructor, as well as improved ratings on classroom performance as measured by observer checklist using expert observers.

Evaluation:

Due to an evaluative error, no achievement pre-test or post-test was administered to measure objective SD-3.1. However, an observer checklist was used to rate teachers' skills in teaching ESL. This checklist was constructed by the program staff in conjunction with Dr. Norman Dube who was in charge of the in-service course. A description of these ratings is presented in Table 108.

Teachers were rated on a pre and post basis on the following qualities: fluency in French, interaction with students, process of interaction, awareness of dialect, acceptance of student language, and reinforcing of positive attitudes. In general, very little change in rating from pre to post occurred. Teachers were rating on a five point scale, with 5 referring to "excellent" and 1 to "poor." No change in rating of the teachers in fluency of French occurred from the pre- to post-test. Teachers were rated on the pre-test on their interaction with students and processes of interaction, but for the post-test this was determined by the course instructor to be non-applicable. The teacher showed a slight improvement in their awareness of dialogue, as more teachers were rated as "good" on the post-test than on the pre-test; 10% of the teachers were rated at "excellent" on the post-test, while no one was rated as "excellent" on the pre-test.

Similarly, a slight improvement occurred in their acceptance of student language from the pre- to post-test. The same percentage of teachers were rated as "excellent" on both tests, but on the post-test 20% more teachers were rated as "good" than on the pre-test. A slight improvement in their reinforcement of positive attitudes also occurred from the pre-test to the post-test. Although the same percentage of teachers were rated as "excellent" on both tests, 15% more teachers were rated as "good" on the post-test, than on the pre-test; no teacher was rated as "fair" on the post-test. Objective SD-3.1 seems to have been accomplished, although its measurement was somewhat limited.

Table 108

Observer Ratings of Project Teachers' Skill in Teaching French as a First Language

Behavior	Rating	Pre %	Post %
Fluency in French	5	15	15
	4	60	60
	3	25	25
	2	0	0
	1	0	0
Interaction with students	5	0	
	4	46	
	3	46	Not Rated
	2	8	
	1	0	
Process Interaction	5	0	
	4	38	
	3	31	Not Rated
	2	31	
	1	0	
Awareness of Dialect	5	0	10
	4	40	80
	3	60	10
	2	0	0
	1	0	0
"Accepting" student language	5	10	10
	4	60	80
	3	30	10
	2	0	0
	1	0	0
Reinforcing positive attitudes	5	10	10
	4	45	60
	3	40	30
	2	5	0
	1	0	0

Objective SD-3.1P:

> Pre-service and in-service courses in teaching French as a first language will be provided using expert instructors. Teachers will maintain 90% attendance at the courses.

Evaluation:

No pre-service course in teaching French as a first language was held. An in-service in teaching French as a first language was held for Title VII personnel. The course title was "Language Learning and the Dialectical speaker in the Elementary School (Practicum)." All program teachers were encouraged to attend. A record of the attendance indicated that the teachers maintained 94% attendance at the courses. Since 93% is greater than the 90% required by the objective, this aspect of the objective was achieved.

SD-3.1P was accomplished to some extent. Because of the late start of the program, no pre-service instruction in teaching French as a first language was held, although in-service instruction was conducted, and appropriate attendance maintained.

Objective SD-4.1:

> 100% of the teachers will achieve at the criterion level established for the test at the end of Preparing Instructional Objectives (Mager, R.F.)

Evaluation:

Eleven program teachers completed the test at the end of Preparing Instructional Objectives on January 30, 1971. All teachers received scores between 20 and 40. The criterion level established for the tests is 37 of 44 items correct. Only one of the eleven teachers received a score of 37 or better; this teacher scored 40 correct. Therefore, only one teacher, or 9% of the teachers, achieved the criterion level.

Objective SD-4.1 has not been accomplished. Because of the importance of understanding the concepts and mechanics of behavioral objectives, the evaluators suggest that the program focus on achievement of objective SD-4.1 during the next program year.

Objective SD-4.1P:

> Mager's test will be provided to teachers and assigned to be completed during the pre-service session.

Evaluation:

Mager's test was provided to the teachers and assigned to them, not during the pre-service session, but on January 30, 1971. All teachers but one received the test that day; this teacher did not complete it because she did not attend the workshop that day.

The appropriateness of objective SD-4.1P for achieving objective SD-4.1 is questionable. Although Mager's test was provided to the teachers, it is unclear whether they were responsible for reading the textbook. This task would be essential for them to complete the test successfully. If they did read it, the information included in the text does not seem to be sufficient for their answering the questions in the final test.

The evaluators suggest that some other type of presentation of the concept of behavioral objectives be used, such as the Vimcet materials. The program staff has informed the evaluator that the Vimcet filmstrips will be used during 1971-72. This process was not used this year because the tight scheduling of the project and its late beginning limited the amount of time which could be devoted to this objective. Objective SD-4.1P was partially completed, because one teacher did not receive a copy of Mager's test, and, therefore, did not complete it.

Objective SD-5.1:

> Teacher aides will contribute significantly to the classroom operations, by assisting the teacher with clericial and managerial matters, with the operation of equipment, with observation and testing of the pupils. The majority of aides will receive positive ratings. Their abilities will be measured by teacher ratings and observer checklists.

Evaluation:

The project director, rather than the project teachers, rated each teacher aide on a five point scale, with 5 representing a rating of "excellent" and 1 representing a rating of "poor." These ratings are summarized in Table 109.

The results shown in Table 109 indicate that for seven of eight duties all aides received a rating of "good," "very good," or "excellent." For the eighth duty, the aide "uses a basic academic French when interacting with students," 40% of the aides received only a rating of "fair." Since this checklist was constructed by the program's staff, it seems that the performance of the aides of quality number eight was important. Therefore, an emphasis should be placed on encouraging the aides to use basic academic French when interacting with students. The evaluators suggest that the project staff investigate some specific activities for structuring such a use of French in the classroom. Objective SD-5.1 has been accomplished and measured through the use of an observer checklist. On-site observation by the project evaluator confirmed the results of this checklist.

Table 109

Rating of Teacher Aides' Performance by Project Director

Duty	% Rating				
	5	4	3	2	1 *
1. Assists teacher in collection of materials and supplies.	0	90	10	0	0
2. Records objectives being met on checklist.	0	30	70	0	0
3. Does follow-up instruction with needy students.	10	50	40	0	0
4. Works with instructional equipment for individual needs.	10	80	10	0	0
5. Assists teacher in preparing materials for class.	10	70	20	0	0
6. Is pleasant and positive with children.	10	20	70	0	0
7. Communicates openly with children.	10	20	70	0	0
8. Uses a basic academic French when interacting with students.	10	0	50	40	0

* 5-Excellent, 4-Very Good, 3-Good, 2-Fair, 1-Poor.

Objective SD-5.1P:

> Aides will participate in pre-service courses designed to impart the necessary clerical managerial and technical skill.

Evaluation:

No pre-service was held for the aides; the Title VII staff did not deem such a course necessary because the teacher aides had already been enrolled in courses designed to meet these needs. The highly positive ratings received by the aides in objective SD-5.1 confirm the judgment by the Title VII staff of the lack of need for this type of pre-service courses for the teacher aides. Objective SD-5.1P was not met. The evaluators feel that justification for its not being met has been made by the project staff.

Objective SD-5.2:

> The majority of teacher aides will participate in professional development courses.

Evaluation:

Eight of ten teacher aides attended such professional development courses. One aide did not participate because she was hired too late in the program to do so. The second aide did not participate because she had already completed the professional development courses. Teacher aides in Van Buren were enrolled in ED 300, entitled "Primary Curriculum, Methods, and Materials." Teacher aides in Madawaska and Frenchville completed CSTS which focused on the use of audio-visual equipment in class. They attended all meetings and satisfied the attendance policies established by the University of Maine for teacher aide certification in the State of Maine. Objective SD-5.2 has been completed.

Objective SD-5.2P:

> Aides will be encouraged by project director and teachers to attend professional development courses. At least one meeting will be held at the beginning of each semester to discuss the courses.

Evaluation:

Meetings were held with aides on October 6, 1970 and January 30, 1971 to encourage their attendance at professional development courses. These meetings were conducted as part of various workshops, at which teacher aides were either given a syllabus or a verbal report of the available courses. The teacher aides then expressed their views about the appropriateness of the course and the possibility of their attending it. Because of the uniqueness of the three systems, courses were generally offered within each system rather than for the entire group of aides. The evaluator attended the meetings on October 6, 1970 and January 30, 1971 and confirmed that at these meetings the aides were encouraged to attend professional development courses. The accomplishment of objective SD-5.2 also suggests that the aides were encouraged to attend professional development courses. Objective SD-5.2 has been accomplished.

STAFF DEVELOPMENT COMPONENT: ADDITIONAL DATA

Workshop Evaluations:

At each workshop a questionnaire was distributed to its participants to determine their reactions to the workshop and obtain suggestions about improving the content and scheduling of the workshop for the next program year. The following narrative, then, discusses the participants' reactions to the workshops held during the 1970-71 program year for the St. John Valley Bilingual Program. Each workshop is discussed individually.

Workshop Held During Week of November 5, 1970

The evaluation of this workshop is included in the discussion of the evaluation of objective SD-1.1.

Workshop of November 23, 1970

This workshop focused on a discussion of Acadian Culture by the anthropology instructor at the University of Maine at Ft. Kent. The overall reaction of the teachers to this workshop was highly positive. Ninety-three percent of the teachers responded that the workshop time was used efficiently and that the instructor's lecture was well-organized. An equally large majority stated that reviewing the French materials and discussing the French word exercises were beneficial. A similar

92% of the teachers did not feel that the workshop was too structured. Eighty-two percent of the teachers replied that explanations given by the project director on program budget were adequate to cover any questions that migh arise concerning money; 80% also agreed that the atmosphere of the St. John School was conductive to workshop activities. No teacher felt that the workshop day was too long.

Workshop of January 30, 1971

This workshop focused on a discussion of roles and needs in the bilingual program, on the distribution and explanation of the test in Preparing Instructional Objectives, and on a discussion of French filmstrips and materials available for ordering. Again, the overall reaction of the participating teachers to this workshop was highly positive. All teachers agreed that it was an appropriate length; 88% of the teachers noted that the workshop was appropriately structured. An ordering of the popularity of the workshop's activities ranked the activites as follows: 1) the small group discussions on program objectives, 2) the film "Mother Tongue," and 3) discussion on the film.

Ninety-one percent of the teachers felt that organizing into the grouping system to discuss the current practices of bilingualism was effective; they preferred the small group discussions to the large group activities. A large majority of teachers, 87%, indicated that the film shown was relevant to the program and their needs, and 78% of the teachers felt that they gained new insights into language learning from viewing the film. Similarly, 71% of the teachers responded that, as a result of the film, changes in the way they worked with children as a group or individually might occur. The teachers almost unanimously agreed, with only 4% dissenting, that the workshop time was used efficiently. In replying to the question about the most appropriate days of the week to hold workshop, the teachers showed varied opinions; 52% preferred to hold the workshop on Saturday, and 45% preferred to schedule it for school days. The evaluators recommend that the teachers be polled to determine their preferences for workshop schedules for the 1971-72 year.

It is interesting to note that only 56% of the teachers saw a positive value to taking the tests in the book Preparing Instructional Objectives. This attitude may further explain their poor performance on objective SD-4.1. The evaluators recommend that the program emphasize development of positive attitudes toward behavioral objective, as well as acquisition of knowledge. The evaluators also recommend the scheduling of additional sessions to discuss the project's objectives; the fact that 84% of the teachers rated this discussion as the outstanding feature of the workshop suggests its appropriateness as the focus of additional activities.

Workshop Visit by Dr. Lambert of February 11 - 13, 1971

The results of the questionnaire completed about the visit of Dr. Lambert to the St. John Valley Bilingual Program are summarized in Table 110.

The results shown in Table 110 demonstrate the positive support of the program teachers for the generally accepted concepts of bilingual education. A majority of teacher, 60%, disagreed with statement two, "The teacher should play the role of a monolingual at all times." This disagreement suggests the teachers' support of the philosophy of the St. John Valley Bilingual Program. Similarly, their agreement with statement five, with 96% agreeing, further reflects their support for the use of the local dialect in introducing French. The teachers, however, seemed divided on the issue of whether to switch from French or English in instruction, statement ten. Perhaps some future in-service courses might focus on the value of each of these approaches so that some type of guidelines or philosophy for the program could be established.

Table 110

Reaction to Views Expressed by Dr. Lambert during his Visit to the Project, February 11 - 13, 1971

	Statement	% Response				
		SA	A	?	D	SD
1.	We should refer to our students as French-American not Franco-American.	24	66	5	5	0
2.	The teacher should play the role of a monolingual at all times.	0	0	40	40	20
3.	Reading should be introduced when the child is intellectually ready--at least by five years of age.	5	57	19	14	5
4.	French should be taught through the teaching of subject matter.	10	66	14	10	0
5.	The local dialect should be used as a basic vehicle to introduce French in the elementary grades.	48	48	0	4	0
6.	The kindergarten program should be a full-day session 1/2 French - 1/2 English.	5	19	14	38	24
7.	We should accelerate the pacing and speed of our bilingual classes.	5	61	14	10	10
8.	We should teach a child to read first in the language that is native to him.	19	48	28	5	0

Table 110 (Cont.)

9.	We need to surpass the norm of the Monolingual English American--when it comes to learning English.	0	40	25	35	0
10.	There should be no "switching" on the part of the teacher when teaching French of English.	28	24	10	38	0
11.	The teacher should assume that the English child wants to learn French.	23	57	10	10	0

Workshop of April 3, 1971

This workshop focused on the process or methods of education in the classroom, with emphasis on the psychology of the disadvantaged learner. The workshop was conducted by Dr. Nichols, a noted child psychologist at the University of Maine. The results of the questionnaire administered about this workshop are included in the project files.

Workshop of May 22, 1971

This workshop was conducted by a representive of "Les Editions Francaises, Inc." A film on "Reading Development and Language" was shown. The teachers were asked to complete an open-ended question which requested them to identify the strongest point of the presentation in order to determine their reactions to this workshop presentation. In general, the teachers and aides reacted highly positively to the workshop. Such comments as "very interesting speaker, showed much understanding of the children we deal with, which should be considered when presenting a speaker," and she "was probably the most dynamic lecturer we have heard this year," reflect this positive reaction. The teachers were most impressed by the presenter's highly dynamic approach, her spontaneous approach to education, her presentation of the flexible classroom approach, and her ideas on teaching reading.

Course EDM 280-Teaching French to the Dialectual Speaker

Participants in the course, "Teaching French to the Dialectical Speaker" were asked to complete a course critique in order to determine the strengths and weaknesses of the course. The overall reaction to the course was highly positive. The participants unanimously agreed that the instructor possessed the depth of knowledge in the course content required to teach it, that the classes had been well prepared, and that the instructor related the course to the actual classroom teaching situation. Similarly, 93% agreed that the objectives of the course were clear; 92% felt that the objectives were appropriate for them. An equally large majority, 92% of the participants, responded that the difficulty of the course was appropriate, while 8% indicated that it was much to difficult for them.

Seventy-six percent of the teachers responded that there was a sufficient supply of materials for the course. A large group of teachers 84%, also agreed that the class time was being used efficiently, and 85% noted that the time alloted to work on classroom activities was used efficiently. Similarly, 84% felt that enough time was spend discussing and participating in French during the course. The majority of the group was satisfied with the organization of the course, as 68% indicated that enough small group discussions had been held. Of course, some examination of whether additional small group discussions could have been included should occur, as 32% felt that not enough small group discussions had been held during the course.

The teachers replied that the addition of more demonstrations on classroom techniques would be a valuable asset to such a course. Sixty-four percent of the teachers stated that the instructor had provided a sufficient number of such demonstrations, but more would be useful; 23% felt that more would not be useful; 8% indicated that not enough had been provided. For most participants the meeting time for the course was convenient. For 85% of the teachers participation in the course had an impact on the way they looked at children in their class. Approximately one-half of the teachers said their command of the French language had improved since the beginning of the course; of these teachers, 90% attributed this improvement to group participation in the course. Seventy percent of the teachers indicated that they were getting enough feedback from the instructor on their written assignments. Similarly 75% noted that they learned about educational objective during the program.

Staff Questionnaire About Program Operation

During December a questionnaire was administered to the Title VII teachers to obtain their reactions to various aspects of the operation of the Title VII program in the St. John Valley. At that time 86% of the respondents felt that they had developed a bilingual curriculum in their classroom. Similarly, 80% responded that they had worked enough with French to determine the type of materials appropriate for French instruction and development. One major criticism of the program, by 50% of the teachers, was that they felt overworked as a result of Title VII. Thirty-three percent of the teachers reported that they did not have adequate time for planning during the school day. The evaluators recommend that an investigation of the criticisms be made and appropriate changes implemented. When questioned about the testing procedures in the program, 86% of the teachers responded that they could foresee a positive value in pre-testing and post-testing for the program objectives; the large majority of teachers, 75%, responded that pre-testing should have been done, as it was, by the classroom teacher or the aide.

The questionnaire also attempted to determine the reaction of the project teachers to the administrative personnel of the project, including the director, curriculum specialist, and evaluator. Although the large majority, 88%, of the Title VII teachers were not disappointed in any way with the Title VII administrative staff, they did feel ill at ease when these administrative personnel entered the classroom. Eighty percent noted that they felt ill at ease when the director entered the classroom, 100% when the curriculum specialist entered the classroom, and 100% when the evaluator entered the classroom.

Repeated discussions and informal interviews with the program teachers after that time indicated that some improvement had occurred in their ease with administrative personnel in the classroom. Yet the evaluators see this as a still existing problem which should be corrected during the next program year. The evaluators recommend that the administrative staff make a more directed effort to make the teachers feel more at ease when they enter the classrooms.

A large majority of teachers agreed, however, that these three administrative personnel visited the classroom often enough, although 12% indicated that the curriculum specialist could be in their classroom more often, and 25% responded that the project director could visit their classroom more frequently. No determination was made if these criticism existed at the end of the project year. The evaluator recommends, therefore, that the administrative staff poll the teachers at the beginning of the new program year to determine the frequency of visits by the project administration they would consider appropriate; a schedule for visitations should then be constructed and maintained.

STAFF DEVELOPMENT COMPONENT: COMMENDATIONS AND RECOMMENDATIONS

Commendations

Based on the data gathered about the staff development component, the evaluators commend the project on the following:

1. The excellent working relationship between all members of the program staff.
2. The excellent and well-received in-service program instituted by the project.
3. The interest and enthusiasm of the teachers and other participants in the in-service program.
4. The respect and enthusiasm commanded by the project director.
5. The participation of the aides in professional development courses.
6. The achievement by the project staff of the large majority of objectives in this component.
7. The positive attitude of the project teachers, teacher aides, and administrative staff toward the program.

Recommendations:

The evidence gathered about this program component suggests the need for the following changes and additions to the staff Development Component:

1. The placement of additional emphasis on second language development among the teachers.
2. The inclusion of pre-service or in-service instruction in teaching English as a second language.
3. A greater involvement of teachers in curriculum development.

4. The introduction of more structured instruction of teachers and aides about behavioral objectives, such as use of the Vimcet materials.

5. More coodination and cooperation between the teachers and the curriculum specialist.

6. The scheduling of more frequent and more regular visits to program classrooms by the administrative staff.

COMMUNITY COMPONENT: EVALUATION OF SPECIFIC OBJECTIVES

Objective C-1.1:

> A community advisory group will be formed by October, 1970. It will consist of French and English speaking community members (businessmen, educators, parents, clergy and high school students). There will be five members from each community, each member approved by the school board.

Evaluation:

An advisory group was formed for each of the communities of the St. John Valley Bilingual Program during the program year. By October, 1970, the deadline specified in the objective, advisory groups had been formed in two of the communities SAD #33 and SAD #24. The Madawaska advisory committee was completed during February, 1971. Five members were selected from each community; each member was approved by the school board. All members were bilingual in French and English. The advisory group for each community contained at least one representative from the following professions: businessmen, educators, parents, clergy, and high school students.

Although the activities cited in Objective C-1.1 were completed, the deadline of October, 1970 was not met because the Madawaska Board of Directors did not select its entire advisory council by that date. The evaluators recommend for the next program year that either the same members remain on the advisory group or all members be selected by the beginning of the school year.

Objective C-1.1P:

> The community will be informed of the opportunity to participate on the advisory council by: 1) letter and 2) director's personal contact.

Evaluation:

The community was informed of the opportunity to participate in the advisory council by letter and by direct personal contact. The formation of the advisory council group was initiated by the project director when he requested from each school board a list of advisory council members for their school district at a meeting on September 17, 1970. The members had to meet the criteria cited in objective C-1.1.

Upon the receipt of a list of names from each school board, the project director sent each selected community member a letter inviting him to participate in the advisory group. Such letters were sent to representatives in two of the school districts during the month of October and to those in the remaining school district by February, 1971. These letters informed the potential advisory group member of his recommendation to become a member of the group and his responsibilities as a member; it encouraged him to participate or to contact the project director if participation was impossible.

Objective C-1.1P was satisfied, although additional effort should have been made by the project management to encourage the formation of the Madawaska advisory group earlier than February, 1971.

Objective C-1.2:

> The advisory group will make at least two suggestions that are accepted and incorporated into the program. The incorporations will be recorded in the director's log.

Evaluation:

The advisory council made three suggestions which were incorporated into the program. A record of these suggestions and of the objectives to which they related was included in the project director's log. The first recommendation was that frequent information about the progress of the project should be presented to the community. This recommendation was accepted and incorporated into the program and was related to objective C-2.1 and C-2.2. The second suggestion, that the program should publicize its activities and explain the role of the project to the parents also related to objective C-2.1 and C-2.2; this suggestion was incorporated into the program. The third suggestion by the advisory council related to the instructional objective K-6.1, K-6.2, K-6.3, 1-5.1, 1-5.2, and 1-5.3. This suggestion stated that the program should stress confidence and pride in the culture of the area.

An examination of the objectives which related to these suggestions and their status at the end of the program indicate that suggestions by the advisory council were indeed incorporated into the program, and the objective relating to these suggestions were satisfied. Objective C-1.2 was accomplished during the 1970-71 program year.

Objective C-1.2P

> The advisory council will meet at least monthly during the year. They will be encouraged by the staff to offer suggestions about the program. These suggestions will be recorded in the minutes.

Evaluation:

Advisory council meetings were held on the following dates: November 10, 1970, December 17, 1970, January 14, 1970, March 25, 1971, May 6, 1971, and June 12, 1971. The frequencies of these meetings did not satisfy the criterion established in the program objective C-1.2P which specified meetings at least monthly. The remainder of the objective, however, was accomplished; suggestions were made by the advisory council members at each of these meetings, and these suggestions were recorded in the minutes of the meeting.

Objective C-1.2P has been partially accomplished. The evaluators recommend that monthly meetings be held during the next program year, and that additional suggestions for the program be elicited from the advisory group at those meetings.

Objective C-2.1:

At least one article per month concerning the bilingual program will appear in the French and English papers of the Valley.

Evaluation:

No articles about the bilingual program appeared in the French papers of the Valley. The project administration reported that no articles had been published in French papers because the only French papers in the area were Canadian. However, a bulletin entitled "Project Brave Bulletin" was distributed monthly to the community, and especially to the parents of program participants. This bulletin described the activities of the program in both English and French and listed any new vocabulary words learned by the students during that month. A pamphlet about the project was also available for distribution.

At least one article per month was published about the bilingual program in the English paper of the Valley, the St. John Valley Times, with the exception of the month of December. Generally, more than one article was published each month. Articles appeared in the St. John Valley Times on the following dates: August 5, 1970, August 15, 1970, October 2, 1970, October 13, 1970, November 5, 1970, January 14, 1971, March 4, 1971, April 15, 1971, and May 13, 1971. Articles were also published in the Bangor Daily News on the following dates: August 5, 1970, September 15, 1970, September 30, 1970, February 1, 1971, and June 3, 1971.

Objective C-2.1 has been partially accomplished, although the dissemination of information which was implemented seemed quite adequate.

Objective C-2.1P:

> The project director will arrange with newspapers to publish at least once article per month which the director and others may prepare.

Evaluation:

The project director arranged with the English newspapers to publish at least one article per month. He spoke with the St. John Valley Times editor in November about the possibility of publishing monthly articles; the director received from the editor an assurance of full cooperation. In addition, the publishing of articles in that newspaper prior to that discussion indicated the newspaper's willingness to cooperate.

No arrangements were made for the publication of articles in the French newspaper of Edmunston, New Brunswick, Canada entitled "Le Madawaska." Instead of publishing articles in this newspaper, the project developed an informational pamphlet for distribution to the community in order to increase the awareness and general information level about the project. The project also published a monthly news bulletin from January to June which was distributed to parents, teachers, advisory council members, the board of directors, and other bilingual projects; this bulletin emphasized the progress of the project through a discussion of the activities of the individuals participating in it.

Objective C-2.1P was partially accomplished. The fact that no arrangements were made with the French newspapers explains the lack of publication of articles in such a newspaper for objective C-2.1. However, the extensive publicity given to the project through the use of monthly news bulletins and informational pamphlets and flyers about the project seems to satisfactorily take the place of publishing articles in a French newspaper in Canada.

Objective C-2.2:

> The project staff will participate in at least two radio and/or TV discussions about the bilingual program.

Evaluation:

Two television discussions and one radio discussion about the bilingual program were held during the project year 1970-71. The TV discussion on September 30, 1970 involved an interview of the project director on the Maine educational television station. The interview focused on the origin of the project, its location, its activities, and the anticipated effects of the project. The TV program on November 18, 1970 included a presentation of a film of classroom procedures room activites, which demonstrated actual classroom procedures used to implement bilingualism in the classroom. Interviews were conducted with teachers and the project director of Title VII.

The radio discussion was held on December 10, 1970; it was an informal discussion about the aims of Title VII and the procedures used to implement the goals of bilingualism in the St. John Valley. Objective C-2.2P was accomplished. More than two radio and television discussions about the bilingual program were held.

Objective C-2.2P:

> The project director will arrange for staff members to participate in the discussions. This will be recorded in the director's log.

Evaluation:

Arrangements were made for television and/or radio discussions through contact with various people on the television and radio stations. These contacts were initiated on September 30, 1970. Further contacts were made on November 18, 1970 and December 10, 1970. Records of these arrangements are included in the director's log. The arrangements were carried out as planned, as indicated by the accomplishment of Objective C-2.2. Objective C-2.2P has been accomplished.

Objective C-3.1:

At least 16 parents will volunteer as aides.

Evaluation:

Because of the late start of this program and the problems involved in initiating a new project, this aspect of the Community Component was not performed. No parents volunteered as aides, because no attempt was made by the project to interest them in this type of participation. The evaluators recommend that this type of parent involvement be considered for next year because it seems to be another excellent way of involving the community in the program. A discussion with the project director indicated that he has already considered including this objective in the 1971-72 program. Objective C-3.1 has not been accomplished.

Objective C-3.1P:

> Parents will be informed that they will participate as volunteer aides in the bilingual program through PTA meetings, letters from school, direct contact with parents.

Evaluation:

This objective was not accomplished. No attempt was made to inform parents that they could participate as volunteer aides because such a program was not organized due to problems involved in initiating a first year program. Objective C-3.1P should be the focus of attention for next year's Community Component. Objective C-3.1P has not been accomplished.

Objective C-3.2:

> 60% of the parents will visit the school at least twice a year.

Evaluation:

Table 11 describes the parents' visitations to the schools in the three districts during the 1970-71 school year.

Table 111

Frequency of Parent Visits to School

School of District	Number of Visits--Cumulative Percent			
	1	2	3	4
Frenchville	90	50	--	--
Madawaska	95	90	90	--
Van Buren	70	50	40	7

The results shown in Table 111 indicate that at least 60% of the parents in each district visited at least once; in two of the three schools districts, however, 60% of the parents did not visit at least twice during the year, the criterion level established in the objective. It should be noted, however, that in one school district 40% of the parents visited three times, and 7% visited four times. In another school district 90% of the parents visited three times.

Objective C-3.2 was not accomplished. The evaluators recommend that an attempt should be made to structure more parents visits to the school during the next program year. This is an excellent way to encourage parent participation in the program and to disseminate information about the project.

Objective C-3.2P:

> Parents will be informed that they can visit the school to observe the program through PTA meetings, letters, direct contact with parents.

Evaluation:

Parents were informed in the monthly bulletin and by personal letter from the project director that they could visit the project. Such invitations, however, were not issued until the fifth month of the program because until that time the project director did not feel that enough progress had taken place in the classrooms to be a positive indication of the program's impact. After the fourth month of the program, when bilingual instruction in the classroom was succeeding, the parents were invited and encouraged to visit the schools. This late invitation of the parents to visit the school may explain the lack of satisfaction of Objective C-3.2.

The evaluators suggest that, because the next program year will not be the first year of program operation, the director take measures immediately at the beginning of the program to encourage parents' visits to the school to observe the program first hand and in that way to gain an understanding of it. The initiation of a parent aide program, which was not implemented during this year's program, will also encourage parent visits to the school.

Objective C-3.2P was accomplished during this year. Parents were informed that they could visit the school through monthly bulletins and letters.

Objective C-3.3:

> At least 50% of the parents will attend at least one meeting of the PTA group.

Evaluation:

The percentage of parents listed below for each school attended at least one meeting of the PTA: Madawaska - meeting held at St. Thomas School on November 18, 1970 - 60%, meeting held at Evangaline School on November 23, 1970 - 90%; Frenchville - meeting held at Bailey School on November 30, 1970 - 55%; Van Buren - 70%. Objective C-3.3 was accomplished. The evaluators suggest that during the next program year attempts be made to attract additional parents to PTA meetings in each district and to attract parents to more than one meeting.

Objective C-3.3P:

> A PTA group will be formed in the fall. Parents will be encouraged to join and actively participate in meetings using various media.

Evaluation:

A PTA group was formed in each of the school districts. The first meeting for the Madawaska group was in November, 1970; additional meetings were held in February, 1971 and April, 1971. The first meeting for SAD #33 was in November, 1970; other meetings were held in February, 1971 and March, 1971. No PTA exists in Van Buren, but a great deal of parent involvement occurs in the follow-through program existing in the St. John School. A record of attendance at meetings about this program was considered attendance at a PTA meeting.

Parents were informed they could participate in the PTA through letters, newspaper articles, and the community calendar on the local radio station. Through these media parents were also encouraged to join the PTA or to participate in the follow-through group and to actively attend meetings. The evaluators suggest that additional encouragement be provided during the next school year to increase participation by the parents in the PTA program. Objective C-3.3P was accomplished.

Objective C-4.1:

> There will be a statistically significant increase ($p<.05$) in parents' enthusiasm about the bilingual

program from September to June, as measured by an attitude scale.

Evaluation:

Tables 112 - 116 describe the responses of the parents to the attitude questionnaire about the program distributed to them in December, 1970. Because of the late administration of the questionnaire, no post questionnaire was administered in June.

Objective C-4.1 was accomplished, as demonstrated by the highly positive attitudes reflected in the parents' responses to the questionnaire administered to them.

Table 112

"Are you pleased that your child is learning a second language?"

District	% Response	
	Yes	No
Frenchville	100	0
Madawaska	98	2
Van Buren	100	0
Total--St. John Valley	99	1

TABLE 113

"How would you rate the Bilingual Program?"

District	% Response			
	Excellent	Good	Fair	Poor
Frenchville	25	56	13	6
Madawaska	51	46	3	0
Van Buren	58	34	6	0
Total--St. John Valley	50	44	5	1

Table 114

"Are you happy that your child is in the Bilingual Program?"

District	% Response	
	Yes	No
Frenchville	100	0
Madawaska	100	0
Van Buren	97	3
Total--St. John Valley	99	1

Table 115

"Do you think that your child is learning as much as he should in school this year?"

District	% Response	
	Yes	No
Frenchville	81	19
Madawaska	96	4
Van Buren	97	3
Total--St. John Valley	95	5

Table 116

"Would you like your child to be in the Bilingual Program next year?"

District	% Response	
	Yes	No
Frenchville	88	12
Madawaska	100	0
Van Buren	97	3
Total--St. John Valley	98	2

Objective C-4.1P:

> See the objectives of the Community Component process objectives for producing this change in parental attitude.

Evaluation:

The evaluation of this process objective can be determined by referring to the evaluations of all product and process objectives in this component and to the summary of the evaluation of the Community Component included in Part I of this report.

Objective C-5.1:

> The project director will invite the personnel from Ft. Kent State College to visit the program and begin participating in the development of the program. A formal relationship with Ft. Kent State College will be established by the end of the year.

Evaluation:

Personnel from Ft. Kent State College were invited to visit and participate in the program. These included Dr. Norman Dube, an in-service instructor, Mrs. Lowell Daigle, an in-service instructor and member of the Board of Directors, Mr. Roger Paradis, a materials development consultant, and Dr. Roger Grindell. Dr. Dube and Mrs. Daigle visited the project by serving as in-service instructors in the teaching of French to Franco-Americans and Acadian Culture, respectively.

The relationship between the college and the project is highly positive. It involved mutual understanding between the two parties of the bilingual needs in the Valley. Letters in support of the project have been received from the staff of Ft. Kent State College; they have cooperated in providing training for the project staff. Objective C-5.1 has been accomplished.

Objective C-5.1P:

> In the fall the project director will approach Ft. Kent State College and encourage their active participation with the project.

Evaluation:

The following list cites the dates and descriptions of contracts between Ft. Kent College and the bilingual project; a record of these contacts is included in the director's log: November 3, 1970 - Director met with chairman of academic affairs, Dr. Roger Grindell; November 10, 1970 - Director attended a faculty conference and discusses possible avenues the college could take in assisting the project in staff training; January 21, 1971 - The director met with Mr. George Milner, the director of C.E.D. in northern Maine; January 22, 1971 - The director met with Dr. Norman Dube to finalize plans for the in-service course he would be instructing from February to June; March 19. 1971 - The director met with President Fox about the possibility of establishing a minor or major in early childhood bilingual education; April 12, 1971 - The project director met with President Fox about the same topic discussed on March 19, 1971.

Objective C-5.1P has been accomplished. This series of meetings indicates the outstanding cooperation and relationship between Ft. Kent State College and the St. John Valley Bilingual Project. Because Ft. Kent State College is the local higher education agency, the evaluators feel that such a liason is very positive and should be continued in future programs.

COMMUNITY COMPONENT: SOCIOLOGICAL DATA QUESTIONNAIRE RESPONSES

In order to determine the general characteristics of the population from which participants in the bilingual program were selected, a sociological data questionnaire was sent to each of the parents of students in the program. The questionnaire was written in both French and English in order to prevent language from becoming the reason for not completing the questionnnaire. The following percentage of returns was obtained from the various districts: Frenchville and St. Agatha Schools - 81%, Madawaska Schools - 78%, Van Buren Schools - 38%. The total number of questionnaires returned for all three districts was 189.

The following discussion describes the sociological background of the bilingual program participants. This section is meant only as a description; no conclusions about effectiveness of program or appropriateness of population should be drawn from this description.

Table 117 describes the number of years the parents have lived in the Valley. Table 117 indicates that the large majority of parents have lived in the St. John Valley for at least five years, and many for more than ten years. A review of places where they lived prior to this time indicates that those who had moved to the St. John Valley within the last five years lived in the United States, not in France or Canada, before

TABLE 117

Parents' Number of Years Residence in St. John Valley

School District	% of Respondents- Years Residence				
	0-1	1-3	3-5	5-10	10+
Frenchville and St. Agatha	4	4	8	26	28
Madawaska	6	5	5	10	74
Van Buren	0	0	7	10	83
All Respondents	4	3	6	16	71

moving to the St. John Valley. Therefore, this is not a population of recent immigrants; it includes long-term residents of the St. John Valley and of the United States.

Table 118 indicates the urban or rural background of the parents of the bilingual participants. Table 118 shows that, for the most part, at least three-fourths of the husbands and wives came from rural backgrounds in their childhood and youth. Madawaska has the highest percentage of city-born dwellers, although even this percentage is not high.

A review of the ages of the parents whose children were in the program indicates that for the entire program, with 181 women responding, 36% of these were under 30; 37% were between ages 31 and 40; 27% were over age 40. The husbands seemed to be

TABLE 118

Parents' Residence During Childhood and Youth

School District	% in City and Country			
	Wife		Husband	
	City	Country	City	Country
Frenchville and St. Agatha	10	90	3	97
Madawaska	28	72	40	60
Van Buren	26	74	19	81
All Respondents	20	80	20	80

slightly older than their wives. Of the 176 husbands whose ages were listed, 24% were under 30; 48% were between 31 and 40 years old; 28% were 41 or older. These parents cannot be characterized as being either very young or very old. Generally a distribution of ages exists.

Table 119 presents a description of the schooling of the parents of the students in the Bilingual Program. Table 119 indicates that the largest group of parents completed twelve years of schooling, or high school. Approximately 10% - 15% of the parents in each of the towns had educations beyond grade 12. In general, the wives had less education than the husbands.

A review of the occupations of the parents indicated that the majority of husbands served in one of the following

TABLE 119

Parents' Schooling-Number of Years

School District	Parent	Number of Years of Schooling-% Respondents											
		6	7	8	9	10	11	12	13	14	15	16	16+
Frenchville and St. Agatha	Wife	1	12	15	13	11	7	26	7	3	3	0	2
	Husband	8	13	15	4	6	3	45	1	1	3	0	1
Madawaska	Wife	11	6	11	14	11	3	30	2	2	4	7	0
	Husband	17	3	4	6	7	7	33	6	4	0	6	7
Van Buren	Wife	8	10	14	10	3	3	38	0	8	3	3	0
	Husband	11	4	7	15	4	0	41	4	7	0	7	0
Entire Program	Wife	7	9	13	13	10	5	30	4	3	3	3	0
	Husband	12	7	9	7	5	4	41	4	4	0	4	3

occupations: laborer, employee of Fraser Paper, farmer, semi-skilled worker, or professional, such as teacher.

Table 120 summarizes the wives' employment status. Table 120 states that approximately 40% of the wives are currently employed in such occupations as beauticians, teachers, and hairdressers. A small group, approximately one-fourth of the wives who responded, indicated that they had planned a career. This response is interesting when compared to the larger percentage currently employed. Many of the wives who are currently working, however, did not work a full week. Many were employed on a part time basis.

TABLE 120

Employment Status

School District	Wife's Status-% Respondents			
	Employed		Planned a Career	
	Yes	No	Yes	No
Frenchville and St. Agatha	42	58	26	74
Madawaska	38	62	24	76
Van Buren	38	62	30	70
Entire Program	40	60	26	74

Table 121 describes the size of families of program participants. Table 121 shows that the large majority of families had five or fewer children; approximately one-fourth of the families had more than five children, although, naturally, the percentage of respondents decreased as the number of children increased.

TABLE 121

Size of Program Families-Number of Children

School District	Number of Children - % Respondents											
	1	2	3	4	5	6	7	8	9	10	11	11+
Frenchville and St. Agatha	3	14	24	13	19	11	5	3	1	3	0	4
Madawaska	3	23	24	18	15	5	2	2	3	5	0	0
Van Buren	3	13	20	17	10	0	10	13	7	7	0	0
Entire Program	3	18	24	12	16	7	6	4	3	4	0	3

The sociological data questionnnaire also included a series of questions to determine the language background of the participants in the bilingual program. Ninety-two percent of the wives and 95% of the husbands indicated that they could speak a language other than English. Generally this second language was French, with perhaps one or maybe two exceptions.

Tables 122 - 124 define the language background of the bilingual participants. Table 122 indicates that between 90% and 97% of the wives in each of the three districts and between 94% and 97% of the husbands in the three districts speak French, although a significantly smaller group, approximately one-third of the respondents, indicated that the wife conversed with her husband in French. Of these, approximately the same percentage conversed with their husband at home, and a slightly smaller percentage used French to converse with their husband outside the home.

TABLE 122

Percentage of Parents Who Speak French

School District	% Respondents				
	Wife	Husband	Wife Converses with Husband		
				At Home	Outside
Frenchville and St. Agatha	97	97	39	33	24
Madawaska	94	94	37	31	26
Van Buren	90	94	31	34	29
Entire Program	94	95	31	44	21

Table 123 notes that between 83% and 87% of the respondents had children who understood them when they spoke French. A smaller percentage, between 67% and 82%, indicated that they had children who spoke to them in French. However, a larger percentage of the children spoke to their parents in French when they were little. These percentages indicate the background of many of the program participants in the area of French language.

TABLE 123

Percentage of Children Who Speak or Understand French

School District	% Respondents		
	Understand Parents	Speak to Parents	Spoke when little
Frenchville and St. Agatha	87	82	93
Madawaska	83	67	78
Van Buren	84	69	86
Entire Program	84	74	85

Table 124 gives some insight into the background in French of the parents. This table states the almost all respondents had parents who spoke French in the home. Madawaska seems to have the lowest concentration of French speaking, but even its 88% is high. Tables 122 - 124 indicates the significant presence of French language in the background of the program participants and their parents.

The sociological data questionnaire also attempted to define the reaction of the parents to the community. This involved a

TABLE 124

Percentage of Parents with Relatives Who Spoke in the Home

School District	% Respondents				
	Some Relative	Maternal Grandmother	Maternal Grandfather	Paternal Grandmother	Paternal Grandfather
Frenchville and St. Agatha	98	95	95	94	94
Madawaska	98	88	89	90	90
Van Buren	97	93	93	94	97
Entire Program	98	92	92	92	92

determination of their participation in their community and their identification of problems in the community. Of the parents who responded to the questionnaire in the three districts combined, only 6% said that they were a past or present officer of the PTA; 70% indicated an interest in the PTA by saying they attended most, if not all PTA meetings. A smaller percentage, 24% said they belong to the PTA, but attended a few meetings. The fact that three-fourths of the parents either were officers in the PTA, or attended most of the meetings, suggests an interest in the school by the community.

Tables 125 and 126 cite the problems of the community identified by the parents. Table 125 shows the parents' ratings of the series of problems which may exist in the community. Parents were to order the problems from 1 to 6, from most to least serious respectively. Table 126 indicates the percent of parents which rated each of the six problems as the most serious. Tables 125 and 126 indicate that the majority of parents saw jobs as the most serious problem in their community. The second most serious problem seemed to be medical problems. Education problems ranked below these two problems and were considered much less severe than job or medical problems.

The parents were asked to identify important goals in life for their sons and for their daughters. Table 127 indicates the amount of education the parents feel youth should have today. It reports that a large percentage of respondents felt that

TABLE 125

Problems of Communities as Seen by Parents

Problem	Degree of Severity - % Respondents					
	(Most) 1	2	3	4	5	6 (least)
Housing	5	17	35	20	12	11
Medical	25	39	14	14	4	4
Education	10	13	18	28	24	7
Jobs	67	21	9	1	2	0
Transportation	1	3	11	19	38	28
Community Spirit	5	7	7	13	19	49

TABLE 126

Most Severe Community Problem as Seen by Parents

School District	% Respondents					
	Housing	Medical	Education	Jobs	Transportation	Community Spirit
Frenchville and St. Agatha	0	17	14	76	0	2
Madawaska	6	37	7	55	0	2
Van Buren	9	12	6	70	5	19
Entire Program	5	25	10	67	1	5

TABLE 127

Amount of Education Parents Feel Youth Should Have

Amount of Education	% Respondents	
	Young Men	Young Women
6th grade or less	0	0
Some high school	1	2
High school education	12	32
High school and technical school	27	29
College education	60	37

young men should have a college education. The parents were in almost unanimous agreement that the young men should have at least a high school education. The degree of education they felt young women should have was slightly less. Only 37% of the parents felt that young women should have a college education, but they unanimously agreed that young women should have at least a high school education. When questioned about their goals for their sons and their daughters, the most frequently mentioned were good education, good jobs, happiness, and health.

Several questions required the parents to describe their attitude toward school and toward the bilingual program. Table 128 indicates that a larger percentage of parents either felt that the schools were doing an excellent job or a fair job. By fair, they seem to mean an adequate job. Very few

TABLE 128

Attitude Toward Job Done by Public Schools

School District	Quality of Job - % Respondents				
	Excellent	Good	Fair	Poor	Very Poor
Frenchville and St. Agatha	36	3	54	7	0
Madawaska	51	2	40	7	0
Van Buren	45	3	52	0	0
Entire Program	43	3	48	6	0

parents felt that the schools were doing a poor job; no parent felt that the were doing a very poor job.

In order to determine the parents' reaction to introducing a bilingual program into the schools, or at least to introducing French into the curriculum, the parents were asked whether they would like their children to learn some French as reported in Table 129. It is interesting to note, however, that as many as 12% of the parents in one district did not want their child to learn some French. Yet, these students are involved in the bilingual program and are learning French. The implications of this response should be explored. Because this questionnaire was administered at the beginning of the year, the attitude of the parents toward learning French may have changed. Similarly, their familiarity with the program may have increased since the time of the administration of this questionnaire.

TABLE 129

"Do you Think it Would be a Good Idea to Teach Your Child Some French?"

School District	% Response	
	Yes	No
Frenchville and St. Agatha	88	12
Madawaska	89	11
Van Buren	93	7
Entire Program	89	11

Table 130 describes the familiarity of the parents with the Bilingual Program at the time this questionnnaire was administered. Table 130 suggests that the majority of respondents at the time of the administration of this questionnaire were only slightly familiar with the bilingual school program. Evidence gathered later, which is included in the evaluation of the Community Component objectives, suggests that by the end of the school year the parents were much more familiar with the bilingual school program and supported it very highly.

TABLE 130

Familiarity of Parents with Bilingual School Program

School District	% Respondents		
	Very Familiar	Slightly Familiar	Not Familiar
Frenchville and St. Agatha	22	57	21
Madawaska	10	62	28
Van Buren	7	54	39
Entire Program	15	58	27

COMMUNITY COMPONENT: COMMENDATIONS AND RECOMMENDATIONS

Commendations

The data gathered to assess the Community Component of the St. John Valley Bilingual Project demonstrate the high degree of success the project had in obtaining the cooperation, understanding, and interest of the community in the project. The evaluators commend the project on the following aspects of its relationship with the community:

1. The high degree of interest in the program shown by the large percentage of parents who visited the school and participated in the PTA.
2. The extensive publicity given to the program through media of television, radio, and English newspapers.
3. Monthly bulletin publication and distribution of an informational pamphlet on the bilingual program published by the curriculum coordinator.
4. The excellent working relationship evidenced between Ft. Kent State College and the St. John Valley Bilingual Project.
5. The incorporation of suggestions made by the advisory council into the bilingual program.
6. The highly positive enthusiasm of the parents for the bilingual program, as indicated by their responses to a questionnaire.
7. The accomplishement of the majority of objectives in this component.

COMMUNITY COMPONENT: COMMENDATIONS AND RECOMMENDATIONS

Commendations

The data gathered to assess the Community Component of the St. John Valley Bilingual Project demonstrate the high degree of success the project had in obtaining the cooperation, understanding, and interest of the community in the project. The evaluators commend the project on the following aspects of its relationship with the community:

1. The high degree of interest in the program shown by the larger percentage of parents who visited the school and participated in the PTA.
2. The extensive publicity given to the program through media of television, radio, and English newspapers.
3. Monthly bulletin publication and distribution of an informational pamphlet on the bilingual program published by the curriculum coordinator.
4. The excellent working relationship evidenced between Ft. Kent State College and the St. John Valley Bilingual Project.
5. The incorporation of suggestions made by the advisory council into the bilingual program.
6. The highly positive enthusiasm of the parents for the bilingual program, as indicated by their responses to a questionnaire.
7. The accomplishement of the majority of objectives in this component.

Recommendations

Although the majority of objectives of the Community Component were achieved, the following recommendations were suggested by the data:

1. An emphasis should be placed on formulation and implementation of a parent volunteer aide program in the schools.
2. The parents should be encouraged to attend additional PTA meetings.
3. The advisory council should be encouraged to make additional suggestions about the program; these suggestions should be incorporated into the program.
4. The advisory council meetings should be held at least monthly.
5. The relationship between the project and Ft. Kent State College should be continued.
6. The institution of adult education courses for parents which would focus on second language instruction or on instruction in other academic areas related to the bilingual education project should be considered.

MATERIALS DEVELOPMENT COMPONENT: EVALUATION OF SPECIFIC OBJECTIVES

Objective MD-1.1:

> The director and curriculum specialist will establish a working relationship with the Title 3 project, by collecting some of their materials and meeting with the director at least once a month.

Evaluation:

The director and curriculum specialist established some type of relationship with the Title III Project staff. They collected books from the Title III project and held a series of meetings with the Title III director on the following dates: September 18, 1970, November 2, 1970, December 10, 1970, and June 5, 1971. Both the director and curriculum specialist were present at two of these meetings, while only the director was present at two of these meetings.

Objective MD-1.1 was partically accomplished. Although some materials were gathered and a working relationship was established with Title III, the Title VII director and curriculum specialist did not meet with the Title III project director at least once a month. The evaluators feel, however, that the extent of this relationship was satisfactory, and that additional meetings between the three people were not necessary.

Objective MD-1.1P:

> The project director and Title III director will meet during the fall to discuss their respective programs. The project director will initiate the contact.

Evaluation:

The project director set up a meeting with the Title III director in the fall of 1970; this meeting was held on September 18, 1970. At the meeting the director and the Title III director discussed the roles of Title III and Title VII and possible cooperation between the two projects in such areas as materials development and development of classroom instructional techiniques.

Objective MD-1.1P was accomplished. The project director and Title III director met during the fall to discuss their respective programs. The partial accomplishment of objective MD-1.1 further confirms the satisfactory accomplishment of MD-1.1P.

Objective MD-1.2:

> The curriculum specialist will collect materials from one follow-through project dealing with French speaking children in the state.

Evaluation:

A report from the project director indicated that no materials were collected from the follow-through project in

Maine because the project had no materials available. Objective MD-1.2 could not be accomplished.

Objective MD-1.2P:

> The curriculum specialist will list all of the follow-through projects dealing with French speaking children. He will initiate contact with these and ask for their materials.

Evaluation:

The curriculum specialist did list all of the follow-through projects dealing with French speaking children; such a list of projects is in the project files. The curriculum specialist did not have to initiate contact with the single project included in this list because personal contact was made weekly between the curriculum specialist of Title VII and the follow-through director. This contact indicated that no materials were available from the follow-through project; therefore, objective MD-1.2 could not be accomplished. Objective MD-1.2P was accomplished.

Objective MD-1.3:

> The director and/or curriculum specialist will contact several and will visit at least one of the Canadian bilingual projects.

Evaluation:

Two Canadian bilingual projects were contacted: the St. Lambert Bilingual Project in Montreal and the Toronto Institute for Studies in Education and its Modern Language Center. The director and curriculum specialist visited one of these projects, the St. Lambert Bilingual Project. A report of this visit is included in the director's log. All Title VII staff who participated in this visit wrote a report on their visit; these were placed in the project files.

In addition, the curriculum specialist made contact with two schools in Edmundston, New Brunswick, Canada, and one school in St. Anne, New Brunswick. The curriculum specialist visited each of these schools in New Brunswick; one of the teachers also visited the school in St. Anne, New Brunswick. One of the schools taught French to English-dominant students; the other taught French to French-dominant students. Written reports of these visits were prepared by the curriculum coordinator and are included in the project files.

Objective MD-1.3 was accomplished. The director and curriculum specialist contacted five bilingual projects in Canada and visited four of these bilingual projects.

Objective MD-1.3P:

> The director and/or curriculum specialist will list the Canadian bilingual projects. He will initiate contact with them and arrange for visits.

Evaluation:

A list of three Canadian bilingual projects is in the project files. A letter of inquiry to each of these projects was written and is also included in the project files. Additional inquires by telephone were made to other projects in Canada, some of which were visited as indicated in Objective MD-1.3. Objective MD-1.3 has been accomplished.

Objective MD-1.4:

> The director will establish a French Bilingual Consortium for materials, processes, testing procedures, ideas with Greenville, Lewiston and New Orleans. Regular procedures for meeting and exchange of materials and ideas will be recorded.

Evaluation:

The director did not establish a French Bilingual Consortium, although he did attend the meeting of all Title VII French Bilingual directors on January 8-9, 1971 in Durham, New Hampshire. It has come to the attention of the evaluators that a different bilingual project in the United States has been assigned the responsibility of organizing the French Bilingual Consortium. The evaluators suggest, therefore, that this objective be revised to focus on the Valley Bilingual Project's cooperating with the project responsible for the French consortium; specification of contributions which should be made to the consortium might also be the focus of the objective.

Objective MD-1.4P:

> The director will visit the Greenville and Lewiston Projects. Written reports of the values of the trips will be recorded.

Evaluation:

The director visited both the Lewiston and Greenville projects, on January 7, 1971 and May 13-15, 1971 respectively. No written report on the Lewiston visit is included in the project files, although the director reported to the evaluator that he met with the Lewiston project director and curriculum coordinator. A report on the visit to the Greenville project is included in the project files.

Objective MD-1.4P has been partically accomplished. The director visited both the Greenville and Lewiston projects and wrote a report on his visit to the Greenville project. The lack of a report on his visit to the Lewiston project prevents this objective from being completely accomplished.

Objective MD-2.1:

> The director and/or curriculum specialist will contact at least six other bilingual projects in their second year of operation and gather ESL materials from them.

Evaluation:

The director contacted only a single second year Title VII bilingual project, the Mascenic Project in New Hampshire, about the possibility of gathering ESL materials from them. A conference was held between that project director and the St. John Valley Bilingual project director. No materials were received from this project.

Additional bilingual projects which might be able to contribute materials to the St. John Valley Bilingual project were also contacted through letters to individuals in the project. These included the director of the Center for Applied Linguistics, director of the Center for Curriculum Development in Audio-Visual Language Teaching, the executive secretary of the American Council on the Teaching of Foreign Languages, the co-director of Pace-Fabric, the senior supervisor of bilingual education of the Commonwealth of Massachusetts, the principal of the bilingual project school in Lafayette, Louisiana, the director of the Early Childhood Bilingual Education Project at Yeshivah University, and the director of English for Speakers of Other Languages Program at the Center for Applied Linguistics. No ESL materials were received from any of these sources.

Objective MD-2.1 was accomplished. The evaluators recommend that the project director attempt during the next project year to obtain ESL materials from additional second year Title VII bilingual projects which were not contacted during the 1970-71 project year.

Objective MD-2.1P:

> The director will identify six bilingual projects most likely to provide help. He will initiate contact with them and ask for their materials.

Evaluation:

The director did not identify the Title VII bilingual projects most likely to provide help. He identified, instead the following bilingual projects which were not necessarily Title VII projects: St. Lambert School in Montreal, Mascenic Bilingual Project, Pace - Fabric Title II Project, Ecole Bilingue, Inc. in Belmont, Massachusetts, several schools in Edmunston, New Brunswick, Canada, the Lewiston Bilingual Program, the Happy Hollow School in Wayland, Massachusetts, and the Washington International School. A letter of inquiry was sent to each of these sources which asked for materials. A copy of the letter is in the project files.

Objective MD-2.1P was accomplished as stated originally. Second year Title VII projects were contacted. Materials were requested; a record of contact is included in the project. The evaluators recommend that the project identify projects likely to provide help and contact them for ESL materials during the next program year.

Objective MD-3.1:

> The project staff will review in writing materials collected in terms of objectives of the Valley's Bilingual Program. Appropriate materials will be selected.

Evaluation:

Objective MD-3.1 was not accomplished. A review in writing of materials collected in terms of the Valley's objectives does not exist. The Title VII staff followed another process by which materials were received and sampled by teachers. Their reaction to the value of these materials for use in the classrooms was recorded by the curriculum specialist. Appropriate materials for use in the classroom were then selected. A substitute activity for objective MD-3.1 was accomplished.

Objective MD-3.1P:

> Teams will be established among the project teachers and teacher aides. The curriculum specialist will find materials to be reviewed and collect written reports from each of these teams.

Evaluation:

Teams were organized in the three school districts of the project by the curriculum specilaist. Materials were examined, discussed, and ordered as the result of meetings of these teams. A record of all the materials relevant for use in each of the three school systems is included in the project files.

A similar procedure was followed for the development of Acadian materials and taped versions of French library books. Materials were assigned to be reviewed by these teams. Review sessions were led by the curriculum coordinator on December 2 and 3, 1970, in Van Buren for those teachers only, December 18 and 30, 1970 in Madawaska for those teachers only, and December 12, 1970 for the entire program staff. Opinions about the materials were collected from each of these review sessions on the materials reviewed; in all cases, except the reviews done on January 11, 1971 written records were provided.

Additional reviews were done during workshops on November 23, 1970 and January 29, 1970 with the whole group in attendance in Van Buren and Madawaska, respectively. Written reports of these workshops are also included in the project files. Objective MD-3.1P was accomplished. Materials were assigned to curriculum development teams, were reviewed, and reports written about them.

Objective MD-3.2:

> The project director and curriculum specialist will meet in December, February, and May to review project objectives with the staff to determine which objectives are not attainable through materials available.

Evaluation:

Meetings were held in October, 1970 and January, 1971 to determine if materials were available for the project objectives. Reports of the availability of materials were made orally to the project administration and action deemed necessary to provide lacking materials was taken. Objective MD-3.2 was accomplished.

Objective MD-3.2P:

> A schedule of meetings will be established by the project director for the purpose of reviewing the objectives. This may be done in teams or through a group review.

Evaluation:

A schedule of meetings was organized for the purpose of reviewing the objectives. This written schedule is included in the project files. Meetings were held for such a purpose on February 13, 1971, March 13, 1971, and April 24, 1971. Any changes made in the original schedule were recorded in the director's log.

Objective MD-3.2P was accomplished. A schedule of meetings was established by the project for the purpose of reviewing the objectives. The fact that objective MD-3.2 was accomplished further indicates the appropriateness of process objective MD-3.2P.

Objective MD-3.3:

> A material development team will develop at least six tapes of stories in French and English for K-1.

Evaluation:

Six tapes of stories for grades kindergarten and one were developed in French for the program. The titles of these tapes were "Les Trois Kangourous," "Les Trois Petits Chats," "La Petite Poule Rouge," "Boucle d'or et les Trois Ours," and "L'ane et le Petit Garçon." A high school senior French class is cooperating in this tape development project.

Objective MD-3.3 was accomplished. The evaluator recommends that additional effort be focused on the development of more tapes of stories in French and English for the program classes.

Objective MD-3.3P:

> Material development teams will be established by the curriculum specialist. He will assign specific tasks to the teams.

Evaluation:

Material development teams were established by the curriculum specialist. These teams included high school tape team, Acadian history team, and Acadian folk songs team. The curriculum coordinator assigned specific tasks to each of these teams; these tasks were performed. The high school tape team developed at least six tapes of stories for grades kindergarten and one. The Acadian History team developed an Acadian history booklet. The junior high school choral group recorded a version of Evangeline.

The evaluators feel the program should be commended on the cooperation of the materials development teams and on the commendable tasks they have accomplished. Objective MD-3.3P has been accomplished.

Objective MD-3.5:

> A materials development team will produce language master cards needed for the performance objectives.

Evaluation:

A complete blank-card set of language master cards was developed as a project by one of the teachers participating in ED 300. In addition, cards including the basic Dolch list were prepared; this list was congruent with instructional objectives 1-3.3 and 1-4.3. Other Title VII staff members, upon receiving blank cards, made their own language master cards to meet the needs of their students and to produce materials which they did not already have available. Objective MD-3.5 was accomplished, although no record was made of the particular use of the blank language cards by the majority of the teachers.

Objective MD-3.5P:

> Material development teams will be established by the curriculum specialist. He will assign specific tasks to the teams.

Evaluation:

Material development teams established by the curriculum specialist included the Acadian History team, the French folk song team, and the high school tape team. A review of the materials developed by these teams indicated that they produced a variety of materials needed by the program. In organizing the materials development teams, the curriculum specialist assigned specific tasks to each team which were performed as assigned.

Objective MD-3.5P was accomplished. Its appropriateness for the accomplishment of objective MD-3.5 was also indicated by the fact that objective MD-3.5 was accomplished. The evaluators note, however, that it would be useful to assign an additional materials development team the task of recording language masters for use in the classrooms for those areas where this year the teachers developed their own cards. A systematic assignment of such materials to be developed is necessary.

Objective MD-3.6:

> A materials development team will collect at least twelve French songs and games for K-1 children.

Evaluation:

Ten French songs and/or games were collected by the materials development team and recorded in the project files. These included "Au Clair de la Lune," "Sur le Pont D'avignon," "Evangeline," "Frere Jacques," "A la Claire Fontaine," "A Saint-Malo," "Beau Port de Mer," "Canadien toujours," "La Riveira St-Jean," and "Le Pot Pourri," Additional songs and games in French may have been developed; however, these are not listed nor their lyrics recorded in the project files.

The evaluators recommend that objective MD-3.6 be included in the next project year so that additional French materials will be developed. The project staff also noted the need for a French specialist who would aid in the development of this French materials and other French materials needed in the classroom. The evaluators confirm the need for this person. Objective MD-3.6 was not accomplished.

Objective MD-3.6P:

> Material development teams will be established by the curriculum specialist. He will assign specific tasks to the teams.

Evaluation:

Materials development teams were established by the curriculum specialist; these included the Acadian history team, the French tape team, and the French folk song team. No team was formed for the establishment of French games. The evaluators suggest that such a team be formed for the next program year, although it should be noted that the French folk song team did participate in the gathering of some French songs and games. The fact that objective MD-3.6 was not accomplished, however, indicates the need for an additional focus on the gathering of

French songs and games. Objective MD-3.6P was accomplished, although it was not totally appropriate for the accomplishment of objective MD-3.6.

MATERIALS DEVELOPMENT COMPONENT: ADDITIONAL DATA

A review of the project files indicated that the curriculum specialist printed a monthly bulletin which included a discussion of the program activities during that month. No particular objective was written which focused on the publication of this type of bulletin. The evaluators feel that the curriculum specialist should be commended on her production of this bulletin, and that an objective should be included in the project proposal which whould require the production of such a bulletin.

In addition, the production of a French record "Evangeline," was not included as the focus of a project objective. This recording contributed to dissemination of information about the project and to the accomplishment of one of the objectives of the program. The evaluators feel that the project should consider including an objective related to the development of records in the project plan.

Discussions with the project director, the curriculum specialist, and teachers of the projects indicated that the project could use a specialist in the area of French language and literature. The present curriculum specialist who will be serving in that function during the next program year, has limited knowledge in this field. Therefore, the project should plan its 1971-72 budget so that a French curriculum specialist can be hired.

In addition, interviews with the teachers suggested that they feel they should be participating to a larger extent in the development of materials. A review of team assignments indicated that not all teachers in the program are participating in materials development. The evaluators note that some restructuring of the development of materials and reassigning of priorities and participant responsibility should be made.

MATERIALS DEVELOPMENT COMPONENT: EVALUATION OF MATERIALS AND EQUIPMENT USAGE IN THE CLASSROOM

Because of the large expenditure of money for equipment included in the project budget, the Office of Education suggested that the evaluation include some type of cost effectiveness analysis for the use of the equipment in the classroom. A report by the project director, which is included in the project files, indicates that justification for this large sum of money spent on materials is based on the use of equipment in the individualized approach used in instruction in the classroom; a large amount of equipment is required to implement such an approach. The report by the project director further justified the purchase of each of the materials included in the budget by relating it to specific instructional procedures planned by relating it to specific instructional procedures planned for use in the classroom: he states that the expense of approximately $60 per child will be used "to develop this project into a model to insure success."

The evaluators, in order to determine the use of materials and equipment in the classrooms, requested each teacher to complete daily a checklist specifying the materials and equipment used during that day in the classroom. This checklist was completed during the months of January through May. On the basis of the responses to this checklist, the evaluator determined the percentage of use of each material during each of these five months for two grades separately. This percentage of use is summarized in Table 131.

A review of Table 131 indicates that, for the most part, the equipment purchased with Title VII funds was used frequently in the classroom. Several pieces of equipment may not be necessary; their actual use in the classroom should be reviewed before spending additional money on similiar items for the 1971-72 program. The presence of three cassettes players, for example, in the first grade classrooms may be excessive as each cassette player does not seem to be used more than 50% of the time. Similarly, the use of the ALAP-AB, the blank card sets, and the filmstrip slide projector in the classroom should be reviewed to encourage its optimum use. Each of these pieces of equipment or materials were used less than 50% of the time; it seems that they might be used more efficiently in the classroom. In general, however, the use of most of the materials and equipment about 50% of the time suggests that the funds spent for equipment were appropriately allotted.

TABLE 131

Use of Equipment in Title VII Classrooms

Equipment	% Usage by Grade and Month									
	K Jan.	1 Jan.	K Feb.	1 Feb.	K Mar.	1 Mar.	K Apr.	1 Apr.	K May	1 May
Cassette Player #1	72	63	86	19	73	60	62	51	75	44
Cassette Player #2	38	34	37	26	31	31	15	25	16	52
Cassette Player #3	-	-	-	39	-	28	-	27	-	52
Record Player	100	40	89	72	70	81	92	87	98	94
Flimstrip Slide Projector	25	21	31	43	21	37	25	40	13	61
English Primer Typewriter	85	62	95	62	81	73	81	64	83	99
French Primer Typewriter	-	20	-	36	-	46	-	49	-	79
Language Master	80	81	81	81	72	75	66	63	75	76
Parlons Francais Kit	43	40	66	51	55	48	48	20	83	29

TABLE 131 (Cont.)

ALAP - A,B	20	35	18	43	18	31	32	25	30	38
Blank Card Set	8	21	31	20	30	39	21	42	43	50
Ginn Kit A	-	-	56	-	52	-	44	-	21	-
Ginn Kit B	-	-	-	20	-	26	-	34	-	15
Oral English - Economy	-	-	54	-	51	-	21	-	11	-
Pocket Charts	-	-	50	-	72	-	65	-	23	-
Weather Charts	-	-	-	42	-	48	-	34	-	70
Talking Dictionary	-	43	-	43	-	41	-	34	-	48

MATERIALS DEVELOPMENT COMPONENT: COMMENDATIONS AND RECOMMENDATIONS

Commendations

Based on the information gathered about the Materials Development Component, the evaluators commend the project on the following:

1. The achievement to a large degree of all the material development objectives.
2. The organization of materials development teams to focus on the areas of Acadian history, French story development, and French folk song development.
3. The production of a record by the junior high school group.
4. The monthly publishing of a bulletin by the curriculum coordinator.
5. The large number of materials developed by the project.

Recommendations

The data gathered about the Materials Development Component, which included a review of the project files and discussions with project administrators and with project teachers suggest the following recommendations:

1. A focus should be placed on the achievement of those objectives which were not accomplished during this school year; these include the production of songs and a written review of some of the materials and a specification of their corresponding instructional objectives.

2. A French specialist should be hired to direct the development of French materials.

3. Additional emphasis should be placed on the evaluation and development of classroom materials.

4. A more uniform system of identifying materials needed by the classroom teachers should be implemented; this would eliminate duplicate production of materials by individual teachers.

5. Teachers should be more involved in the curriculum development.

6. Additional material development teams should be formed to focus on such areas as French song and game development and French materials development.

7. More stress should be placed on the development of second language materials.

8. Greater contact should be made with bilingual projects who might offer ESL materials, French materials, or materials in other second languages which could be adopted for use in French.

OVERALL PROGRAM MANAGEMENT:
POSITION QUALIFICATIONS AND RESPONSIBILITIES

The first responsibility of program management was to select a project director, curriculum specialist, and evaluator who possessed certain qualifications and who would perform a series of duties specifically listed in the project management plan. A review of the individuals selected, their qualifications, and duties performed, indicates a high congruence between the proposed qualifications and responsibilities and the actual implementation.

Project Director

The project director possessed each of the qualifications specified for him in the project proposal and performed each of the duties attributed to him in that document. The project director had:

1. Elementary teaching experience - Taught at Acadia schools for 3 years.
2. Administrative experience for 3 - 5 years - Principal of Bailey School.
3. Language education experience - Taught at an elementary school and was principal of an elementary school which had bilingual participants.
4. Fluency in French - Native language is French.
5. Willingness to accept responsibility to manage completely new program involving pupil instruction, material development, staff training, and community involvement - was instrumental in initiating Pace-Fabric project, a Title III project in Frenchville, Maine, which involved each of these four activites and was instrumental in organizing the Title VII Bilingual Project.

6. Masters Degree - M.Ed. from the Universtiy of Maine in 1966.

The project director performed each of the following duties:

1. Fiscal accounting - Responsible for the fiscal procedures of the project and for insuring their implementation.
2. Establishment of a management schedule - Wrote the management schedule included in the project proposal.
3. Contracting and hiring personnel - Hired the curriculum specialist, bookkeeper, other secretaries and evaluator.
4. Evaluation - Assisted the project evaluator by providing information required and suggestions for areas to be evaluated.
5. Community participation - Disseminated information to the community through newspaper articles and by insuring that a monthly bulletin was published by the curriculum specialist.
6. Direct revision of project objectives - Worked with the the teachers at the beginning of the year and during various workshops to revise objectives.
7. Proposal preparation - Revised the proposal for the 1970-71 year and prepared the proposal for the 1971-72 year, which was accepted and funded by the Office of Education.
8. Report preparation - Reports prepared on a monthly basis; responsible for keeping project files up to date.
9. Overall responsibility for directing the program toward the stated goal - Reference to the evaluation of the entire project indicates the satisfactory completion of this duty by the project director.

Curriculum Specialist

The curriculum specialist also had the necessary qualifications for her position and performed the duties stated in the project proposal. The curriculum specialist had the following qualifications:

1. Language educational experience - Ten years of teaching experience.

2. Elementary teaching experience - Five years of elementary teaching.

3. Fluency in French - Fluent in French as a second language.

4. Familiarity with elementary curriculum materials - Taught "Student Center Language Arts Curriculum" to two groups on the primary level and one group at the intermediate level.

5. Curriculum development skills - Indicated by teaching of "Student Center Language Arts Curriculum."

6. Ability to work with teachers - Teaching of "Student Center Language Arts Curriculum" is one indication of this ability.

7. Masters degree preferred - Received M.Ed. from University of Maine in 1970.

The curriculum specialist performed the duties stated as her responsibilities in the bilingual project. These duties included:

1. Visit other bilingual projects - Visited St. Lambert's School in Montreal, Notre Dame School and St. Paul School in Edmundston, New Brunswick, Washington International School, and Ecole Bilingue in Belmont, Massachusetts.

2. Examine and review existing bilingual and elementary materials for adoption or adaption - Review of the achievement of the Materials Development Component indicates the completion of these activities.

3. Develop new curriculum materials congruent with stated goals - Participated in development of Les Acadiens and other books, tapes, and fairy tales.

4. Worked with teachers in curriculum development - Made weekly visits to classrooms and participated in program workshops.

5. Coordinate consultants and efforts of other personnel for curriculum development - Contacted Dr. Lambert, Dr. Nichols, Mr. Verron and Mrs. Violette, who served as consultants in materials development workshop.

6. Conduct in-service training - Taught courses entitled "Student Center Language Arts Curriculum" and "Special Problems in Bilingual Education."

7. Community Involvement - Attended PTA meetings, teacher sessions with psychologists, and participated on radio programs cited in the Community Development Component.

Evaluator

The evaluator also had the qualificiations required for this position and performed the duties specified for his role in the program. The qualifications included:

1. Bilingual - Native French.
2. Teaching experience - Taught French for 2 years.
3. Masters Degree Preferred - Enrolled in a Masters Degree Program; has earned 15 credits toward degree.
4. Completed courses in measurement and research - Had such courses as part of undergraduate education.
5. Willingness to learn new techniques of evaluation - Interview with evaluator indicates his willingness in this area.

The evaluator performed the following duties:

1. Specified objectives - Worked with teachers during the year at various workshops.
2. Construct instruments - Formulated tests with help of teachers for instructional component and revised these instruments based on suggestions made by Heuristics, Inc.
3. Process evaluation - Done weekly through compilation of teacher checklists and through on-site observation of classes.
4. Data analysis - Done under the direction of Heuristics, Inc.
5. Report writing - Wrote weekly reports for two of three months of the program, completed the interim report, and formulated a list of commendations and recommendations for inclusion in the final report.

OVERALL PROGRAM MANAGEMENT: PLANNING OBJECTIVES

Planning Objective 1:

Involve teachers in revising instructional component. Due date October 1, 1970.

Evaluation:

The kindergarten teachers revised the kindergarten objectives and the first grade teachers revised the first grade objectives during the week of September 28, 1970. This objective was accomplished on schedule.

Planning Objective 2:

Parent meetings with 3 districts to explain program and begin in class activities. Due date - October 18, 1970.

Evaluation:

A meeting with parents was held in Madawaska on November 17, 1970 to explain the program and begin class activities. This objective was accomplished later than scheduled.

Planning Objective 3:

Formation of advisory council, first meeting. Due date - October 18, 1970.

Evaluation:

The advisory council was formed by November 10, 1970. It included a businessman, a clergyman, a parent, an educator, and a high school student representative from each district, except Madawaska, where only 3 members had been selected by November 10. The remaining representatives from Madawaska were selected in February. This planning objective was accomplished later than scheduled.

Planning Objective 4:

Meet with teaching staff to discuss ongoing activities in class. Due date October 30, 1970.

Evaluation:

The evaluator met weekly with each teacher. At each meeting materials, supplies, technical assistance, and in-service were discussed. This objective was accomplished on schedule.

Planning Objective 5:

Begin gathering materials from various projects.
Due date - November, 1970.

Evaluation:

This objective was accomplished on November 18, 1970, when materials were received from the St. Lambert School in

Montreal. Additional materials were received at a later date. Planning Objective 5 was accomplished on schedule.

Planning Objective 6:

Meet with teaching staff to discuss ongoing activities in class. Due date - November, 1970.

Evaluation:

A meeting was held on November 23, 1970, at which the curriculum specialist and the evaluator met with each teacher and discussed materials, supplies, technical assistance, and in-service. In addition, the curriculum specialist and evaluator met with each teacher weekly to discuss these four areas. Planning Objective 6 was accomplished on schedule.

Planning Objective 7:

Evaluation of project to date - Heuristics and Evaluator. Due date - November, 1970.

Evaluation:

During the month of November the following reports were received by the project director from the evaluator who prepared them with the assistance of Heuristics, Inc.:

1. Pre-testing program
2. Workshop evaluation
3. Process checklist
4. Tabulation of sociological data questionnaire

Planning Objective 7 was accomplished on schedule.

Planning Objective 8:

> Meet with teaching staff to discuss ongoing activities in class. Due date - December, 1970.

Evaluation:

The evaluator met weekly with the teachers during the month of December and discussed materials, supplies, technical assistance, and inservice. Planning Objective 8 was accomplished on schedule.

Planning Objective 9:

> Advisory Council-meeting of total group. Date due - December, 1970.

Evaluation:

The Frenchville advisory council met on December 17, 1970. Five of the six members attended the meeting. Objective 9 was not accomplished as scheduled, because the entire advisory council group did not meet.

Planning Objective 10:

> Local councils from each community will meet once a month. Due date - monthly from October to June.

Evaluation:

Two meetings of local councils were held. The Frenchville council met on December 17, 1970 and the Van Buren advisory council met on January 14, 1971. Planning Objective 10 was not accomplished. The evaluators recommend that the project director attempt to accomplish this objective during the next program year.

Planning Objective 11:

> Begin plans on summer institute 1971 to be formulated for continuation proposal. Due date - December, 1970.

Evaluation:

The project director met with Dean Knight of the University of Maine at Ft. Kent to discuss the possibility of the 1971 summer institute. These meetings were held on December 2, 1970 and December 10, 1971. Planning Objective 11 was accomplished on schedule.

Planning Objective 12:

> Board of Directors meet to discuss project. Due date - December, 1970.

Evaluation:

A meeting of the Board of Directors was held on December 11, 1970. At that meeting they discussed the minutes of the previous meeting, what constitutes a quorum, the need for establishment of a finance committee to authorize funds for Title VII, the financial structure to be instituted at the beginning of

1971 year, the pre-audit contract, and the progress of Title VII to date. Objective 12 was accomplished on schedule.

Planning Objective 13:

> Audit of program objectives. Begin process evaluation of classroom procedures. Due date - December, 1970.

Evaluation:

The process checklist was first collected during the month of December; responses were tabulated by the project evaluator. Feedback about the frequency of specific instructional process activities was provided to the project teachers. Planning Objective 13 was accomplished on schedule.

Planning Objective 14:

> Begin in-service training on teaching English as a second language. Due date - December, 1970.

Evaluation:

No in-service training on teaching English as a second language was held. The evaluators recommend that the program focus on this type of training during the next program year and attempt to accomplish such training on the projected date specified in the management schedule. Planning Objective 14 was not accomplished during the program year.

Planning Objective 15:

Meet with teaching staff to discuss ongoing activities in class. Due date - January, 1970.

Evaluation:

A meeting was held on January 29, 1971 with the entire teaching staff to discuss classroom activities; materials, supplies, technical assistance, and in-service training were discussed at this meeting. Objective 15 was accomplished on schedule.

Planning Objective 16:

First parent visit to the school. Due date - January, 1971.

Evaluation:

The following percentage of parents visited each of the schools for the first time during the month of January: Madawaska kindergarten - 60%, Madawaska grade one - 90%, Van Buren kindergarten - 70%, Van Buren grade one - 70%, Frenchville kindergarten - 90%, Frenchville grade one - 90%. Objective 16 was accomplished to some extent, although as the management objective is stated, it implies that 100% of the parents should visit the school during the mongh of January. The evaluators recommend that the project attempt during 1971-72 to encourage all parents to visit the school during the stated month.

Planning Objective 17:

PTA meeting. Due date - January, 1970.

Evaluation:

PTA meetings were held in Madawaska and Frenchville during the month of January, 1971. Ninety percent of the parents in each district attended. In Van Buren, however, no PTA meetings were held; parent-teacher conferences were substituted for such meetings. Attendance at these conferences was 70%. Planning Objective 17 was accomplished on schedule.

Planning Objective 18:

Evaluation of project-Heuristics. Due date - January/February, 1971.

Evaluation:

Two representatives of Heuristics, Inc. met with project teachers to discuss the evaluation of the Title VII program on January 25, 1971. At that time any questions that the teachers had about the project evaluation were discussed. In addition, Heuristics reviewed the on-site evaluation activities of the project up to that date. Planning Objective 18 was accomplished on schedule.

Planning Objective 19:

Meet with teaching staff to discuss ongoing activities in class. Due date - February, 1971.

Evaluation:

Weekly meetings with each individual teacher were conducted by the project evaluator and curriculum coordinator; at these meetings materials, supplies, technical assistance, and in-service training were discussed. Planning Objective 19 was accomplished on schedule.

Planning Objective 20:

Begin finalizing summer 1971 institute with Project staff. Due date - February, 1971.

Evaluation:

Meetings were held on February 8, 1971 and February 13, 1971, at which plans for the summer 1971 institute were discussed with the staff. Language input, staff development suggestions, and materials development suggestions for the institute were discussed at these meetings. Planning objective 20 was accomplished on schedule.

Planning Objective 21:

Evaluation of Project and audit report. Due date - March, 1971.

Evaluation:

The interim evaluation of the project and audit report were submitted on March 31, 1971, and April 1, 1971 respectively.

The interim evaluation report written by the evaluator was submitted to the project director at that time for inclusion in the continuation proposal. This report was prepared by the on-site evaluator with the assistance of Heuristics, Inc. Planning objective 21 was accomplished on schedule.

Planning Objective 22:

Board of Directors meeting. Due date - March, 1971.

Evaluation:

A meeting of the Board of Directors was held on March 12, 1971. Eleven of the members attended the meeting. Objective 22 was accomplished on schedule.

Planning Objective 23:

Begin continuation proposal. Due date - March, 1971.

Evaluation:

The continuation proposal was begun on March 25, 1971. Planning objective 23 was accomplished on schedule.

Planning Objective 24:

Advisory Council meeting-whole Valley. Discuss program for next year, review audit report. Due date - March, 1971.

Evaluation:

A meeting of the Advisory Council for the entire Valley was held on March 25, 1971. Each of the members in the three school districts attended. The program for the next project year was discussed; a review of the audit report was also made. Planning objective 24 was accomplished on schedule.

Planning Objective 25:

Finalize continuation proposal with project staff. Due date - April, 1971.

Evaluation:

A meeting with the project staff was held on April 24, 1971, at which time the continuation proposal was finalized. Planning objective 25 was accomplished on schedule.

Planning Objective 26:

Second parent visit to school. Due date - April, 1971.

Evaluation:

No structured second parent visits to the schools were held during April. Therefore, no record of the percentage making a second visit to the school during the month of April is included at this point. A reference to the evaluation of the Community Component will indicate the percentage of parents making a second visit to the school. Planning objective 26 was not accomplished on schedule. The evaluators recommend that during the next project year some attempt be made to structure more formally parent visits to school with greater frequency than during the current project year.

Planning Objective 27:

Evaluation of project-Heuristics. Due date - April, 1971.

Evaluation:

A meeting was held between the project director, the on-site evaluator, and Heuristics, Inc. representatives on April 13-14, 1971, at which time the current evaluation of the project and plans for evaluation of the 1971-72 project were discussed. Planning objective 27 was accomplished on schedule.

Planning Objective 28:

Audit report from Dr. Picard, Due date - May, 1971.

Evaluation:

The audit report for inclusion in the continuation proposal was received from H. Stuart Picard on April 26, 1971. Planning objective 28 was accomplished on schedule.

Planning Objective 29:

Staff involvement on final evaluation. Due
date - May, 1971.

Evaluation:

On May 22, 1971, a meeting was held for the entire staff, at which the final evaluation was discussed. Planning objective 29 was accomplished on schedule.

Planning Objective 30:

Advisory council meeting on program for next
project year. Due date - June, 1971.

Evaluation:

On June 12, 1971 an advisory council meeting was held to discuss the program for the next project year. Included in the discussion were the types of songs to be used in the classroom during the next project year. Planning objective 30 was accomplished on schedule.

OVERALL PROGRAM MANAGEMENT: PROGRAM ORGANIZATION

A review of the program organization in terms of lines of responsibility, lines of authority, and supervisory organization indicated that the program operated smoothly and in accordance with the organization projected in the management section of the proposal. Observation of the project based on on-site visits by the evaluators and discussions between project personnel and the evaluators, indicated the excellent operation of the program and the appropriateness of the lines of authority established and implemented.

The overall program management involved the selection of the Board of Directors, Advisory Council, teachers, and teacher aides to satisfy the requirements stated in the project proposal. The following discussion summarizes the qualificiations and performance of duties of these particular groups.

Board of Directors

The Board of Directors satisfied the qualifications established in the management plan. As a body the Board of Directors has performed the duties specified. The Board of Directors has satisfied the following qualifications:

1. Must be elected representative of local district he/she is representing - All are elected representatives.
2. Include four superintendents as advisors to the Board of Directors - Because the Ft. Kent school were not included in the project, the Board of Directors included only three superintendents.

3. To include a representative from Ft. Kent University of Maine as advisor to the Board of Directors - Mrs. Lowell Daigle is this representative.

4. Only elected representatives have power to vote in decision process - Only school board members, who are elected by the communities, are allowed to vote.

The Board of Directors also has performed the following duties specified for it in the project proposal:

1. Oversee project in management of funds and programs.
2. Be responsible for keeping local boards of program involvement in their schools.
3. Work directly through director.
4. Give advice in project evaluation.

Advisory Council

The advisory Council has also satisfied the qualifications required of it. The Advisory Council is composed of:

1. One of each of the following criteria from each district: Businessman, clergy, educator, parent of a kindergarten child, parent of a first grade child, high school student.
2. Must be approved by local school board - Each local school board selected the members of the Advisory Council from its district.

The Advisory Council has performed the following duties:

1. Discuss with project director program objectives.
2. Make suggestions regarding project.
3. Represent interests of the community.
4. Establish a grievance procedure whereby parents wanting information and clarification could use this avenue.
5. Promote the project.
6. Assist in project evaluation.

S.A.D. #33 Board of Directors

This group possesses the following qualifications:

1. Are elected representative of S.A.D. #33.
2. Authorized representative of the Board; that is, they are superintendents.

They have performed the following duties:

1. Grantee, authorized to receive funds.
2. Authorize transaction of funds.
3. Delegate responsibility to Title VII Board of Directors.

Teachers

The program teachers possess the following qualifications:

1. Must be bilingual - All program teachers are bilingual.
2. Must have experience in kindergarten or grade one - All teachers, except one first year teacher, had teaching experience in kindergarten or grade one.
3. Must be willing to participate in a new program involving time and new techniques - All teachers have participated in this program and willingly spent extra time outside of their regular school day in attending workshops and making materials required by the program.

The teachers have also all performed the following duties required by them:

1. Worked together as a team to develop a sound bilingual program.
2. Participated in various teams involving materials development, program sequence, and test development - This was done at various program workshops.
3. Participate in in-service workshops and include practical ideas in their regular classroom teaching - On-site observation of classes indicated the performance of this duty by the teachers.

Teacher Aides

The teacher aides all possess the following qualifications:

1. Must be bilingual - All are bilingual.
2. Must be cooperative - All are cooperative as shown by rating in staff development evaluation.
3. Must be willing to participate in professional courses leading to a career - All teacher aides have completed one or two courses cited as professional courses.
4. Must be willing to participate in in-service and pre-service training - All aides have participated in this training.

In addition the aides have all successfully performed the following duties, as verified by conversations with classroom teachers and on-site observation by the evaluator and project director:

1. Replace teachers when necessary.
2. Act as liason with the community.
3. Provide added incentive to the teacher.

OVERALL PROGRAM MANAGEMENT: REPORTING OBJECTIVES

Table 132 lists the reporting objectives of the management component in the left hand column, the date at which they were supposed to be performed in the second column, the date they were actually completed in the third column, and an indication, an X, if they were accomplished on schedule in the fourth column.

TABLE 132

Status of Accomplishment of Reporting Objective

	Due Date	Date Done	X if Completed on Schedule
Collecting Baseline Data	Oct. - Nov.	Oct. - Nov.	X
Workshop (Oct. 5-9) evaluation report October	October	Oct. 5 - 9	X
Reporting to parents on benefits of the program and its usefulness to their children Oct. 15 & 25	October	Oct. 28 - 29	X
Evaluation reports on in-service program (Oct. 51-12)	Oct. 30	November	
Report on baseline data collection	Oct. 30	November	
Evaluation team report on quality and quantity of record keeping	Nov. 15	Jan. 12	
Report form OE-5140	Nov. 10	Nov. 10	X
Evaluation report on classroom activities	Nov. 30	November	X
Evaluation report on teacher effectiveness	Nov. 30	November	X

TABLE 132 (Cont.)

Report form OE-5140	Dec. 10	Dec. 10	X
Report form OE-5141	Dec. 15	Dec. 15	X
Student achievement evaluation report	Dec. 30	December	X
Report form OE-5141	Jan. 10	Jan. 10	X
Auditor's report of total project to date	Jan. 15	Jan. 2	X
Evaluation of classroom activities and Teacher Aides	Jan. 30	Feb. 10	
Report on in-service programs being undertaken by project staff	Jan. 30	January	X
Report form OE-5140	Feb. 10	Feb. 10	X
Classroom evaluation report by evaluator	Feb. 28	February	X
Project director's log evaluation by Evaluator	Feb. 28	February	X
Evaluation of materials collected and developed and evaluation of team for development	Feb. 28	February	X

OVERALL PROGRAM MANAGEMENT: COMMUNICATION, COORDINATION, DISSEMINATION OBJECTIVES.

Table 133 lists the Communication, Coordination, and Dissemination Objectives of the Title VII Bilingual Project. Included is a statement of each objective in the left-hand column, the date on which it was supposed to be accomplished in the second column, the date when the objective was actually accomplished in the third column to the right, and an X in the fourth column if it was accomplished on schedule.

It is important to note that the communication-coordination-dissemination objectives were accomplished, for the most part, on schedule.

TABLE 133

Accomplishment Status of Communication Coordination, Dissemination Objectives Checklist

Communication, Coordination, Dissemination Objective	Due Date	Date Done	X if Completed on Schedule
Announcement on project approval and set up organization	September	September	X
Coordination of activites within the (4) districts	September	September	X
Staff involvement in communication (5th-9th) Board of Directors invited	October	October	X
News release on project staff personnel	October	October	X
T.V. interview on Maine ETV network	Sept. 28	Sept. 30	
Preliminary plans on radio, Starting date of monthly newsletter to parents and interested citizens	Oct. 19	Dec. 10	
Progress report (including evaluation) to Board of Directors and Advisory Council	Oct. 30	Jan. 10	

TABLE 133 (Cont.)

Visitation to Greenville, N. H. (Mesinic) project	Nov. 15		
Staff meeting on coordination of activities	November	Apr. 7 -9	
Finalized details on weekly radio program sponsored by Title VII to inform and explain program to community	December	Nov. 23	X
Advisory council meeting on coordination and grievance procedures	December	Dec. 10	X
Board of Directors progress report on Communication	January		
Staff meeting on communication	Jan. 15		
Monthly newsletter to include materials development component	January	Jan. 29	X
Continuation of radio programs to include other projects in the area (LEA) and correlations with Title VII	January	Jan. 6	X

TABLE 133 (Cont.)

Newsletter to focus on evaluation procedures of Title VII	January		
Staff meeting on communication procedures of Title VII	February	Feb. 10	X
Staff meeting on communication with parents	February		

OVERALL PROGRAM MANAGEMENT: BUDGET AND ADMINISTRATIVE SERVICES

A review of the project budget and administrative services indicated that they were in good order and well documentated. The program operated smoothly. All fiscal transactions are well marked and clear. The procedures for transaction of funds and for the handling of the fiscal account of the program were transferred to the program on January 1, 1971 and have been operating smoothly since that time.

OVERALL PROGRAM MANAGEMENT:
COMMENDATIONS AND RECOMMENDATIONS

Commendations

The project should be commended on the following aspects of its management:

1. The excellent management of the program.
2. The efficient implementation of all management objectives.
3. The scheduling of the management objectives.
4. The appropriate selection of all personnel for the project and their performance of the duties specified in the project proposal.
5. The fiscal operation of the project and the appropriateness and clarity of fiscal transactions as indicated in the program files.

Recommendations

The evaluators recommend that the project review those management objectives not accomplished on schedule. Then appropriate changes should be made so that the objectives can be implemented on schedule.